Purpose and Background

Cloud services potentially offer empowering benefits over traditional computing methods, such as ease of collaboration and sharing of information, lower cost, higher performance and faster delivery of services. This policy endorses the use of *University Data*¹ with cloud services in a manner that sustains the appropriate security standards that the University has adopted for data protection.

Requirements regarding the acceptable use of University Data with cloud services are detailed below. These requirements align with NIST 800-171² and other recognized cybersecurity standards, reflect common practices at institutions of higher education and supplement the CUNY Acceptable Use of Computer Resources and IT Security Procedures policies.

While a *Cloud Service Provider*¹ (CSP) may claim it is secure or compliant with regulations and compliance frameworks, the responsibility for data security and compliance with applicable laws and regulations rests primarily with the *Cloud Customer, Data Owner and Data User*¹, and, institutionally, CUNY. In other words, use of cloud services does not absolve CUNY, including faculty and staff, of the obligation to ensure that data is properly and securely managed.

Scope

This policy applies to all *University Entities*¹ using, or considering the use of, a Cloud Service Provider that can process, manage, create, collect, share or store University Data for any University purpose. Examples of cloud services include, but are not limited to, Internet-based web applications, commercial email and other messaging, social media, document storage and cloud platforms and infrastructure.

Personal use of cloud services on personal accounts is not subject to this policy.

¹ See Definitions and Terms below.
² See Related Information below.
Acceptable Use of University Data in the Cloud

Statement

It is the responsibility of the Cloud Customer, in consultation with the Data Owner, IT and legal counsel, to determine whether a particular cloud service and CSP can suitably maintain the required level of security and regulatory compliance on an ongoing basis. Further, since the use of cloud services involves, to a varying degree, delegating custody and aspects of data security to the CSP, the CSP must be contractually obligated, through a legally binding agreement with CUNY, to assume its delegated responsibilities.

In order to determine security protections commensurate with the level of required confidentiality, the Data Owner is responsible to evaluate, determine, document and share the classification of its University data with Cloud Customers according to CUNY’s Data Classification Standard. The Data Classification Standard defines three classification categories for University Data: Confidential Data, Sensitive Data and Public Data. Refer to the Data Classification Standard for detailed descriptions and pre-defined data types for these classification categories.

Sufficient security protections must be implemented to meet the most sensitive data potentially present (i.e., highest data classification) in a particular use of a cloud service irrespective of the presence of less sensitive data. It must not be assumed that University acquired cloud services are inherently suitable to secure any data.

Once a cloud service is implemented, on an ongoing basis the Cloud Customer must periodically assess whether cloud service security requirements remain satisfactorily in effect as required. Such assessments shall be conducted by the Cloud Customer (in consultation with the Data Owner(s) and IT) 1) prior to service renewal, 2) when service terms are changed by a CSP, 3) when the classification of data changes and 4) as otherwise required to support the bi-annual CUNY IT Security Attestation.

Self-provisioned, personal cloud service accounts may not be used for Confidential or Sensitive Data. Regardless of the classification of data used, cloud service accounts must comply with University licensing and legal requirements.

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3 See CUNY IT Security Policies and Procedures under Related Information below
4 Ibid. CUNY IT Security Procedures
5 That is, cloud service accounts not associated with a University procured or licensed service approved for use with such data
Acceptable Use of University Data in the Cloud

<table>
<thead>
<tr>
<th>Classification</th>
<th>Use of Cloud Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidential Data</td>
<td>Confidential Data is <strong>NOT ALLOWED</strong> to be processed, created, collected, stored nor archived in the cloud <strong>UNLESS</strong> the specific use and CSP security protections and certifications have been reviewed and approved by the University’s Chief Information Security Officer (CISO) in consultation as necessary with Cloud Customer(s), Data Owner(s), College CIO(s), Information Security Manager(s) and relevant offices possessing expertise on the type of data involved, including Provost(s). Cloud services handling Confidential Data shall be assessed for security protections defined by NIST 800-171*, including “basic” and “derived” security controls, as applicable.</td>
</tr>
<tr>
<td>Sensitive Data</td>
<td>Sensitive Data is <strong>NOT ALLOWED</strong> to be processed, created, collected, stored and archived in the cloud <strong>UNLESS</strong> the service is determined to support security controls as necessary to sufficiently protect the data. The 30 NIST 800-171* basic security controls (<em>Appendix B</em>) should be used to guide Sensitive Data security requirements. The Data Owner, College CIO and/or College Information Security Manager, or CIS for the Central Office, must be consulted to determine that adequate protections are present in the cloud service with documented approval. The University CISO shall be informed when Sensitive Data is approved to be stored in a cloud service by a campus. The appropriate CIO or designee shall share such approval with the University CISO.⁶</td>
</tr>
<tr>
<td>Public Data</td>
<td>Public Data is <strong>ALLOWED</strong> to be freely published, processed, created, collected, stored and archived in the cloud without restriction. Public Data should be made as widely accessible as appropriate to promote data sharing and transparency across the University. While disclosure of Public Data is by definition of little or no risk to the University, nevertheless, access, integrity and availability protections may be desirable for particular Public Data.</td>
</tr>
</tbody>
</table>

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* NIST 800-171, *Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations*, defines 14 families of security requirements. (See Appendix A.) The 800-171 standard also maps to other recognized information security standards such as ISO/IEC 27001 and the NIST Cybersecurity Framework. ⁶ Until a formalized process for security assessment and approval is established, the University CISO should be informed by email to ciso@cuny.edu.
Cloud Service Provider Suitability

To determine whether a CSP can maintain the required level of data security based upon the classification of the data involved on an ongoing basis, and be suitable for the intended purpose, the Cloud Customer, in consultation with, and with the participation of, the Data Owner(s), IT and legal counsel, shall determine whether the CSP can:

- Meet security requirements sufficient to protect the University Data involved and support CUNY’s required compliance with applicable laws, regulations and policies.
- Integrate well with University systems as necessary, including identity management.
- Avoid intermingling CUNY’s data with that of other cloud customers to reduce the potential for loss of customer segregation and inappropriate disclosure.
- Detect and respond promptly to a data breach and notify CUNY in a timely fashion.
- Assert operational and security competence through attestation by independent auditors, e.g., AICPA SSAE SOC reports.
- Agree to meet required service levels. (Service Level Agreement—SLA)
- Negotiate terms of service that meet CUNY IT and legal requirements and comply with applicable NY State laws.

Cloud Service Contractual Agreement Information Security Terms

The University’s agreement with a CSP shall clearly specify contractual data protection terms that address the (non-exhaustive) areas listed below. The terms must ensure that University Data is kept appropriately confidential, is not changed inappropriately and is available to the University as needed. The agreement with a CSP should:

- Define University Data that must be protected and describe how the CSP will protect it.
- Define the relationship and expectations regarding the division of security responsibilities between the Cloud Customer and the CSP.
- Define the data owned by each party, and declare the types of data that might be exchanged and how they will be securely exchanged.
- Indicate whether or how the CSP can use University Data. A CSP cannot use Confidential or Sensitive University Data without agreement by the University or in any way that violates the law or University policies.
- Specify that University Data be physically stored within the boundaries of the United States. (May be legally required to avoid jurisdictional issues.)
Acceptable Use of University Data in the Cloud

- Require the CSP to return University Data to the Cloud Customer upon request in a reasonable, usable format, both during the term of the agreement and upon termination or expiration.

- Require the CSP to securely and irreversibly erase or destroy University Data, unless its retention has been explicitly agreed to, upon termination or expiration of the agreement.

- Require the CSP to notify CUNY promptly of a data breach of CUNY protected information.

- Require the CSP to provide, on an ongoing basis, the results of independent audit reports on security controls.
Acceptable Use of University Data in the Cloud

Related Information

CUNY IT Policies—including CUNY Policy on Acceptable Use of Computer Resources
http://www.cuny.edu/about/administration/offices/CIS/policies.html

CUNY IT Security Policies and Procedures—cybersecurity policies, data breach notification procedure, etc.
https://security.cuny.edu

NIST 800-171. Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations—cybersecurity standard for assessment of security protections

NIST Cybersecurity Framework—framework standards, guidelines, and practices to reduce cybersecurity risks
https://www.nist.gov/cyberframework

Definitions and Terms

Affiliate or Affiliated Organization: Any organization associated with the University that uses University resources to create, access, store or manage University Data to carry out business functions. This applies to all third-party vendors under a contractual agreement.

Cloud Customer: The individual or University Entity that procures, or seeks to procure, or is the primary University contact for, a cloud service involving University Data on behalf of the University.

Cloud Service Provider: A Cloud Service Provider, or CSP, is a company that offers some component of cloud computing as a service to other businesses or individuals. See Cloud Service Models below.

Controlled Unclassified Information (CUI): A term used by the NIST 800-171 standard, for the purpose of this policy CUI is any University Data that requires protection.

Data Owner: the University Entity (typically a function or department) that can authorize or deny access to certain data, can delegate custody of that data and is accountable for its accuracy, integrity and timeliness. The Data Owner is responsible for appropriately classifying its data as well as implementing security controls that appropriately protect its data resources. Common examples of Data Owners:
Acceptable Use of University Data in the Cloud

<table>
<thead>
<tr>
<th>Description</th>
<th>Common Data Owner(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Records</td>
<td>Registrar, Enrollment Management, Bursar, Student Finance, Student Affairs</td>
</tr>
<tr>
<td>Employee Records</td>
<td>Human Resources</td>
</tr>
<tr>
<td>Research Data</td>
<td>Researcher, Principal Investigator</td>
</tr>
<tr>
<td>Financial Data</td>
<td>Finance, Business Office, Procurement</td>
</tr>
<tr>
<td>Academic</td>
<td>Faculty, Department Chair, Dean, Provost, Academic Affairs</td>
</tr>
</tbody>
</table>

**Data User:** Creates, accesses and alters data as well as uses data resources and is responsible to comply with data use requirements.

**University Data:** Any CUNY institutional data related to CUNY’s academic, research and administrative functions either stored on CUNY information technology systems or maintained by, or on behalf of, CUNY faculty, staff, students and affiliates in any format or location.

**University Entities:** All colleges, academic, research and administrative departments and affiliates.

**Cloud Service Models**

<table>
<thead>
<tr>
<th>Software as a Service (SaaS)</th>
<th>Users interact with the CSP’s application running on its cloud infrastructure. Comparatively, the most responsibility for security is delegated to the CSP in the SaaS model.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform as a Service (PaaS)</td>
<td>The Cloud Customer deploys its own application onto the cloud infrastructure using programming languages, libraries and tools supported by the provider. Moderate responsibility is delegated to the CSP in this model.</td>
</tr>
<tr>
<td>Infrastructure as a Service (IaaS)</td>
<td>The Cloud Customer provisions processing, storage, networks and other computing resources where it is able to deploy and run arbitrary software, including virtual servers, operating systems and applications. The least responsibility is delegated to the CSP in this model, as the Cloud Customer is responsible for everything but infrastructure and virtualization.</td>
</tr>
</tbody>
</table>
Appendix A

NIST 800-171 Security Control Families


<table>
<thead>
<tr>
<th>Requirement Family</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Control</td>
<td>Who is authorized to view this data?</td>
</tr>
<tr>
<td>Awareness and Training</td>
<td>Are the Cloud Customer and its users made aware of their information security responsibilities?</td>
</tr>
<tr>
<td>Audit and Accountability</td>
<td>Are records kept of authorized and unauthorized access? Can violators be identified?</td>
</tr>
<tr>
<td>Configuration Management</td>
<td>Are networks, configurations and protocols baselined and changes approved and documented?</td>
</tr>
<tr>
<td>Identification and Authentication</td>
<td>What users are approved to access the data and how are they verified prior to granting them access?</td>
</tr>
<tr>
<td>Incident Response</td>
<td>What’s the process if a breach or security threat occurs, including proper notification?</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Who is responsible to conduct routine maintenance, and how is it scheduled?</td>
</tr>
<tr>
<td>Media Protection</td>
<td>How are electronic and hard copy records and backups safely stored? Who has access?</td>
</tr>
<tr>
<td>Physical Protection</td>
<td>Who has physical access to systems, equipment and storage environments?</td>
</tr>
<tr>
<td>Personnel Security</td>
<td>How are employees screened prior to granting them access to data center environments or to the data?</td>
</tr>
<tr>
<td>Risk Assessment</td>
<td>Are defenses tested? Are operations or individuals verified regularly?</td>
</tr>
<tr>
<td>Security Assessment</td>
<td>Are security processes and procedures effective? Are improvements needed?</td>
</tr>
<tr>
<td>System and Communications Protection</td>
<td>Is information regularly monitored and controlled at key internal and external transmission points?</td>
</tr>
<tr>
<td>System and Information Integrity</td>
<td>How quickly are possible threats detected, identified and corrected?</td>
</tr>
</tbody>
</table>
## Appendix B

### NIST 800-171 “Basic” Security Requirements

<table>
<thead>
<tr>
<th>Reference No.</th>
<th>Requirements Family</th>
<th>Security Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.1</td>
<td>Access Control</td>
<td>Limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems).</td>
</tr>
<tr>
<td>3.1.2</td>
<td>Access Control</td>
<td>Limit information system access to the types of transactions and functions that authorized users are permitted to execute.</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Awareness and Training</td>
<td>Ensure that managers, systems administrators, and users of organizational information systems are made aware of the security risks associated with their activities and of the applicable policies, standards, and procedures related to the security of those systems.</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Awareness and Training</td>
<td>Ensure that organizational personnel are trained to carry out their assigned information security-related duties and responsibilities.</td>
</tr>
<tr>
<td>3.3.1</td>
<td>Audit and Accountability</td>
<td>Create, protect, and retain information system audit records to the extent needed to enable the monitoring, analysis, investigation, and reporting of unlawful, unauthorized, or inappropriate information system activity.</td>
</tr>
<tr>
<td>3.3.2</td>
<td>Audit and Accountability</td>
<td>Ensure that the actions of individual information system users can be uniquely traced to those users so they can be held accountable for their actions.</td>
</tr>
<tr>
<td>3.4.1</td>
<td>Configuration Management</td>
<td>Establish and maintain baseline configurations and inventories of organizational information systems (including hardware, software, firmware, and documentation) throughout the respective system development life cycles.</td>
</tr>
<tr>
<td>3.4.2</td>
<td>Configuration Management</td>
<td>Establish and enforce security configuration settings for information technology products employed in organizational information systems.</td>
</tr>
<tr>
<td>3.5.1</td>
<td>Identification and Authentication</td>
<td>Identify information system users, processes acting on behalf of users and devices.</td>
</tr>
</tbody>
</table>
## Acceptable Use of University Data in the Cloud

<table>
<thead>
<tr>
<th>Reference No.</th>
<th>Requirements Family</th>
<th>Security Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5.2</td>
<td>Identification and Authentication</td>
<td>Authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.</td>
</tr>
<tr>
<td>3.6.1</td>
<td>Incident Response</td>
<td>Establish an operational incident-handling capability for organizational information systems that includes adequate preparation, detection, analysis, containment, recovery, and user response activities.</td>
</tr>
<tr>
<td>3.6.2</td>
<td>Incident Response</td>
<td>Track, document, and report incidents to designated officials and/or authorities both internal and external to the organization.</td>
</tr>
<tr>
<td>3.7.1</td>
<td>Maintenance</td>
<td>Perform maintenance on organizational information systems.</td>
</tr>
<tr>
<td>3.7.2</td>
<td>Maintenance</td>
<td>Provide controls on the tools, techniques, mechanisms, and personnel used to conduct system maintenance.</td>
</tr>
<tr>
<td>3.8.1</td>
<td>Media Protection</td>
<td>Protect (i.e., physically control and securely store) information system media containing CUI, both paper and digital.</td>
</tr>
<tr>
<td>3.8.2</td>
<td>Media Protection</td>
<td>Limit access to CUI on information system media to authorized users.</td>
</tr>
<tr>
<td>3.8.3</td>
<td>Media Protection</td>
<td>Sanitize or destroy information system media containing CUI before disposal or release for reuse.</td>
</tr>
<tr>
<td>3.9.1</td>
<td>Personnel Security</td>
<td>Screen individuals prior to authorizing access to information systems containing CUI.</td>
</tr>
<tr>
<td>3.9.2</td>
<td>Personnel Security</td>
<td>Ensure that CUI and information systems containing CUI are protected during and after personnel actions such as terminations and transfers.</td>
</tr>
<tr>
<td>3.10.1</td>
<td>Physical Protection</td>
<td>Limit physical access to organizational information systems, equipment, and the respective operating environments to authorized individuals.</td>
</tr>
<tr>
<td>3.10.2</td>
<td>Physical Protection</td>
<td>Protect and monitor the physical facility and support infrastructure for organizational systems.</td>
</tr>
<tr>
<td>3.11.1</td>
<td>Risk Assessment</td>
<td>Periodically assess the risk to organizational operations (including mission, functions, image, or reputation), organizational assets, and individuals, resulting from the operation of organizational</td>
</tr>
</tbody>
</table>
## Acceptable Use of University Data in the Cloud

<table>
<thead>
<tr>
<th>Reference No.</th>
<th>Requirements Family</th>
<th>Security Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>systems and the associated processing, storage, or transmission of CUI.</td>
</tr>
<tr>
<td>3.12.1</td>
<td>Security Assessment</td>
<td>Periodically assess the security controls in organizational information systems to determine if the controls are effective in their application.</td>
</tr>
<tr>
<td>3.12.2</td>
<td>Security Assessment</td>
<td>Develop and implement plans of action designed to correct deficiencies and reduce or eliminate vulnerabilities in organizational information systems.</td>
</tr>
<tr>
<td>3.12.3</td>
<td>Security Assessment</td>
<td>Monitor information system security controls on an ongoing basis to ensure the continued effectiveness of the controls.</td>
</tr>
<tr>
<td>3.12.4</td>
<td>Security Assessment</td>
<td>Develop, document, and periodically update system security plans that describe system boundaries, system environments of operation, how security requirements are implemented, and the relationships with or connections to other systems.</td>
</tr>
<tr>
<td>3.13.1</td>
<td>System and Communications Protection</td>
<td>Monitor, control, and protect organizational communications (i.e., information transmitted or received by organizational systems) at the external boundaries and key internal boundaries of organizational systems.</td>
</tr>
<tr>
<td>3.13.2</td>
<td>System and Communications Protection</td>
<td>Employ architectural designs, software development techniques, and systems engineering principles that promote effective information security within organizational information systems.</td>
</tr>
<tr>
<td>3.14.1</td>
<td>System and Information Integrity</td>
<td>Identify, report, and correct information and information system flaws in a timely manner.</td>
</tr>
<tr>
<td>3.14.2</td>
<td>System and Information Integrity</td>
<td>Provide protection from malicious code at appropriate locations within organizational information systems.</td>
</tr>
<tr>
<td>3.14.3</td>
<td>System and Information Integrity</td>
<td>Monitor information system security alerts and advisories and take appropriate actions in response.</td>
</tr>
</tbody>
</table>
Purpose and Background:

This standard defines a framework for categorizing the University’s institutional data assets by establishing a data classification standard. It is the intention of this standard to promote the widest possible use of University Data in support of University academic, research and administrative objectives by providing the uniform basis to define appropriate levels of protection and to comply with applicable laws and regulations.

This standard is derived from a variety of sources, including FIPS 199, Standards for Security Categorization of Federal Information and Information Systems, NYS-S14-002, the New York State Information Classification Technology Standard, NIST SP800-122, Guide to Protecting the Confidentiality of Personally Identifiable Information (PII), as well as the data classification standards of other institutions of higher education.

Scope:

This standard applies to all University Entities and governs all University Data, electronic or non-electronic, which is processed, created, collected, stored or archived by the University. Any individual who uses, stores or transmits University Data shares the responsibility to appropriately safeguard such data.

Statement:

This Data Classification Standard categorizes types of data for determining security measures that correspond to its sensitivity and the level of risk should the data be inappropriately exposed, altered, purged or unavailable. The Data Owner is the primary party responsible to use this standard to evaluate and classify University Data within its purview according to the classification categories outlined below. It is appropriate for the Data Owner to confer with Subject Matter Experts who possess in-depth knowledge regarding its information assets.

A dataset or system must be classified to reflect the highest classification required of any data element that can be present. For example, if a dataset contains a student’s name and optional
Data Classification Standard

social security number, the dataset should be classified as Confidential Data even though a student’s name may, by itself, be classified at a less restrictive classification level. Equally important, data must be classified according to the lowest (least restrictive) category appropriate to that data in its context.

Three data classification categories are defined below.

- **Confidential Data:** Data shall be classified as Confidential when the unauthorized disclosure, alteration or destruction of that data could result in a **significant level of risk** to the University. Significant risk includes but is not limited to: substantial financial, reputational and/or personal privacy loss; impairing the functions of the University; or presenting a legal or financial liability. Confidential Data requires the highest level of protection and control. See Appendix A for a list of predefined types of Confidential Data.

- **Sensitive Data:** Data shall be classified as Sensitive when the unauthorized disclosure, alteration or destruction of that data could result in a **moderate to low level of risk** to the University. All data that is not classified as Confidential Data or Public Data should be considered Sensitive Data. Sensitive Data requires moderate protection. See Appendix B for examples of Sensitive Data.

- **Public Data:** Data shall be classified as Public when the unauthorized disclosure, alteration or destruction of that data could result in **little or no risk** to the University. Examples of Public Data include data published on public websites, press releases, course catalog information, job postings, etc. While access control measures may or may not be required for particular Public Data, protections to ensure the integrity and/or availability of certain Public Data may be appropriate.

**Non-Public University Information**

The definition of Non-Public University Information (NPUI), as defined in the *CUNY IT Security Procedures – General (June 25, 2014)*, is superseded by this standard. The combined Confidential and Sensitive data classifications are substantially comparable to the less-detailed NPUI definition and may be used to guide compliance with the Procedures until they are revised.

**Reclassification**

On an ongoing basis, Data Owners should evaluate the classification of their University Data to ensure the assigned classification remains appropriate based on any changes to legal and contractual obligations as well as changes in the use of the dataset and its value to the University.

If a Data Owner determines that the classification of a certain data set has changed, an analysis of security protections should be performed to determine if modifications are necessary to align
with the new classification. Any required changes to the protection profile should be implemented in a timely manner.

Related Information

CUNY IT Policies - http://www.cuny.edu/about/administration/offices/CIS/policies.html

CUNY IT Security Policies and Procedures – https://security.cuny.edu

CUNY Records Retention Schedule – http://policy.cuny.edu/schedule/


Payment Card Industry Data Security Standard -
https://www.pcisecuritystandards.org/pci_security/

FIPS 199 - Security Categorization of Federal Information and Information Systems
https://csrc.nist.gov/publications/detail/fips/199/final

SP 800-122 - Guide to Protecting the Confidentiality of Personally Identifiable Information (PII)
https://csrc.nist.gov/publications/detail/sp/800-122/final

NY State Information Technology Standard – Information Classification

Definitions and Terms

**Affiliate or Affiliated Organization**: Any organization associated with the University that uses University resources to create, access, store or manage University Data to carry out its business functions. This applies to all third party vendors under a contractual agreement.

**Data Element**: A unit of data that refers to one separate item of information, such as name, address, date of birth, etc.

**Data Owner**: The University Entity (typically a function or department) that can authorize or deny access to certain data, can delegate custody of that data and is accountable for its accuracy, integrity and timeliness. The Data Owner is responsible to classify its data so that appropriate safeguards are applied to protect its data resources. Common examples of Data Owners:
Data Classification Standard

<table>
<thead>
<tr>
<th>Description</th>
<th>Common Data Owner(s)</th>
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</thead>
<tbody>
<tr>
<td>Student Records</td>
<td>Registrar, Enrollment Management, Bursar, Student Finance,</td>
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<td></td>
<td>Student Affairs</td>
</tr>
<tr>
<td>Employee Records</td>
<td>Human Resources</td>
</tr>
<tr>
<td>Research Data</td>
<td>Researcher, Principal Investigator</td>
</tr>
<tr>
<td>Financial Data</td>
<td>Finance, Business Office, Procurement</td>
</tr>
<tr>
<td>Academic</td>
<td>Faculty, Department Chair, Dean, Provost, Academic Affairs</td>
</tr>
</tbody>
</table>

**Data User**: Creates, accesses and alters data as well as uses data resources and is responsible to comply with data use requirements.

**Dataset**: A collection of *Data Elements*, such as data contained in a file, document or database or as aggregated in any form.

**Personally Identifiable Information (PII)**: Any information that permits the identity of an individual to be directly or indirectly inferred.

**Subject Matter Expert**: A subject matter expert (SME) is an individual with an in-depth, authoritative understanding of a particular functional area such as registration, enrollment, finance, etc.

**University Data**: Any CUNY institutional data related to CUNY’s academic, research and administrative functions either stored on CUNY information technology systems or maintained by, or on behalf of, CUNY faculty, staff, students and affiliates in any format or location.

**University Entities**: All colleges, academic and administrative departments and affiliates.
Appendix – A
Predefined Types of Confidential Data

1. Personally Identifiable Information (PII)

PII is any information about an individual that can be used to distinguish or trace a natural individual’s identity.

The following list contains examples of information that may be considered PII.

- Name, such as full name, preferred name, maiden name, mother’s maiden name, or alias
- Personal identification number, such as social security number (SSN), passport number, state-issued driver’s license number, state-issued non-driver identification card number, taxpayer identification number, patient identification number, and financial account or credit card number
- Address information, such as home street address or personal email address
- Asset information, such as Internet Protocol (IP) or Media Access Control (MAC) address and other persistent static identifier that consistently links to a particular person or a small, well-defined group of people
- Telephone numbers, including mobile, business, and personal numbers
- Personal characteristics, including photographic image (especially of face or other distinguishing characteristic), x-rays, fingerprints, or other biometric image or template data (e.g., retina scan, voice signature, facial geometry)
- Information identifying personally owned property, such as vehicle registration number or title number and related information
- Information about an individual that is linked or linkable to one of the above (e.g., date of birth, place of birth, race, religion, weight, activities, geographical indicators, employment information, medical information, education information, financial information).

Contextual Considerations

The context, nature and combinations of PII data elements present are factors relevant to the level of confidentiality for a particular use. For example, a list of names contained within a file can be classified differently depending upon the nature of the list:

<table>
<thead>
<tr>
<th>Example Context</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals with a criminal record</td>
<td>Confidential</td>
</tr>
<tr>
<td>Students requiring behavioral intervention</td>
<td>Confidential</td>
</tr>
</tbody>
</table>
Data Classification Standard

<table>
<thead>
<tr>
<th>Example Context</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immigration status</td>
<td>Confidential</td>
</tr>
<tr>
<td>Employees with poor performance ratings</td>
<td>Confidential</td>
</tr>
<tr>
<td>Compliance training participants</td>
<td>Sensitive</td>
</tr>
<tr>
<td>Attendees at a public meeting</td>
<td>Public</td>
</tr>
</tbody>
</table>

It is therefore relevant for Data Owners to consider context when determining an appropriate data classification for particular instances of PII. PII containing personal identification numbers shall be classified Confidential Data regardless of context.

2. New York State Private Information

New York State data breach notification law defines “private information” as any information that permits the identity of an individual to be inferred (e.g., name) in combination with one or more of the following data elements:

- Social Security Number
- State-issued driver's license number
- State-issued non-driver identification card number
- Financial account number, credit or debit card number, in combination with any required security code, access code, or password that would permit access to an individual’s financial account

Data containing New York State private information is classified Confidential Data regardless of context.

3. Personally Identifiable Education Records

Student educational records that require protection under the Federal Educational Rights and Privacy Act (FERPA). Examples include class rosters, test scores, grades and financial aid information that can be associated with an individual.

FERPA permits certain PII defined as “directory information” to be disclosed to outside organizations and/or inquirers without prior student consent, unless a student requests such information be withheld. Directory information is information that is generally not considered harmful or an invasion of privacy if released. Such directory information should be classified as Sensitive.

Student ID

A student’s unique ID number and user ID (e.g., CUNYfirst EMPLID, account username, etc.) can be considered directory information as above so long as it cannot be used to gain
access to education records except when used in conjunction with one or more factors that authenticate the user’s identity, such as a password, personal identification number (PIN), or other factor known or possessed only by the authorized user.

4. Protected Health Information (PHI)

Health information about an individual including medical records, health status, and records covered by health privacy laws.

5. Citizenship

Information about an individual’s US citizenship status, immigration information, etc.

6. Personnel Records

Personnel records of a confidential nature including disciplinary and behavioral matters, evaluations, background checks, criminal records, police, court and investigation records, etc.

7. Payment Card Information

Payment cardholder information requiring protection under the Payment Card Industry Data Security Standard (PCI DSS), such as credit and debit card numbers, card expiration dates, etc.

This includes the credit/debit card number (also referred to as a primary account number or PAN) in combination with one or more of the following data elements:

- Cardholder name
- Service code
- Expiration date
- CVC2, CVV2 or CID value
- PIN or PIN block
- Contents of a card’s magnetic stripe

8. Covered Financial Information

Regulated financial information, such as student financial aid records requiring protection under the Gramm-Leach-Bliley Act (GLBA), and other relevant regulations.

9. Restricted Procurement Information

Procurement information that must remain confidential as defined by New York State finance law, including RFP bid responses during the “restricted period.”
10. Federal Tax Information ("FTI")

FTI is defined as any return, return information or taxpayer return information that is entrusted to the University by a taxpayer or the Internal Revenue Services. See Internal Revenue Service Publication 1075 Exhibit 2 for more information.

11. Intellectual Property

Trade secrets, technology, designs, models and other information that may be relevant for the creation of a University, faculty or student owned patent.

12. Personally Identifiable and Restricted Research Data

Human subject and other research data containing PII (i.e., not de-identified) and/or licensed under a restricted data use agreement or other applicable restriction mandated by the CUNY Human Research Protection Program (HRPP) / Institutional Review Board (IRB).

13. Passwords and Access Codes

Any information held in confidence by an individual used to verify the identity of the person, such as passwords and access codes. Such verifiers can also be used to prove the identity of a system or service. Examples include:

- Passwords
- PINs
- Access codes
- Tokens
- Shared secrets
- Cryptographic private keys

14. Export Controlled Materials

Export Controlled Materials is defined as any information or materials that are subject to United States export control regulations including, but not limited to, the Export Administration Regulations ("EAR") published by the U.S. Department of Commerce and the International Traffic in Arms Regulations ("ITAR") published by the U.S. Department of State. See the Information and Guidelines on Federal Export Control Laws and Regulations, published by the Office of Sponsored Programs, for more information.
15. Other Confidential Information

Any data that by its nature requires confidentiality or that the University is required to maintain confidentially, such as data subject to a confidentiality agreement executed by the University.
Appendix – B

Examples of Sensitive Data

- Email and other communications regarding internal matters which have not been specifically approved for public release
- Proprietary financial, budgetary or personnel information not explicitly approved by authorized parties for public release
- Identities of donors or other third-party partner information maintained by the University not specifically designated for public release
- Information designated as “Directory Information” under FERPA. Directory information that is withheld by the request of a student should be classified as Confidential Data. (See “Appendix A Personally Identifiable Education Records”)
- Examinations (questions and answers)
- IT system configurations and logs not containing Confidential Data
- Business recovery and emergency response plans
- Any other non-Confidential Data that should not be distributed publicly
Appendix – C

Examples of Public Data

- The content of public websites, like www.cuny.edu
- Course curriculums
- Class schedules (not student specific)
- Course catalogs
- Information about campus activities, clubs and organizations
- University policies
- Academic calendars
- Academic programs
- Information on how to access educational resources
- Publicly accessible services
- Press releases
- Public communications and advisories
- Information that by law or regulation is required to be publicly disclosed
- Scholarly publications, research data and findings not otherwise classified as Confidential or Sensitive Data.

Note: Though, by definition, disclosure of Public Data must present little or no risk to the University (irrespective of whether such disclosure is intended or desired), it is nevertheless appropriate for Data Users and Data Owners to apply access restrictions for certain Public Data. Examples include draft or provisional documents; scholarly publications during development, collaboration and peer review; targeted communications and other Public Data documents prior to approval for general release or publication.