EDUCAUSE Core Data Service Module 7: IT Security

This module includes questions about IT security organization, staffing, policies, and practices related to information technology security. In responding to the survey questions, please enter data that describe your "current" IT environment, unless a question specifically requests data for the prior fiscal year. This is an optional module. If you choose to complete this module, all questions are required unless otherwise noted.

1. What is the title of the highest-ranking person with primary responsibility for the "operational" aspects of IT security across your institution? Note that this person may not report within the central IT organization.

   X Chief Information Security Officer
   - Chief, IT Security Officer
   - Information Security Officer
   - IT Security Officer
   - Executive Director, Information Security
   - Executive Director, IT Security
   - Director, Information Security
   - Director, IT Security
   - Manager, Information Security
   - Manager, IT Security
   - CIO or equivalent also serves in this role
   - Other (please specify) [ ]

2. What percentage of full-time does this person devote to IT security?

   X 100%
   - 80-99%
   - 60-79%
   - 40-59%
   - 20-39%
10-19%
less than 10%

3. To whom does this person report? (Check all that apply.)

☐ Board of Trustees/Regents
☐ President/Chancellor
☐ Provost/Chief Academic Officer
☐ Chief Administrative Officer
☐ Chief Financial Officer
☐ Director of Internal Audit
☒ Highest-ranking IT administrator/officer (e.g., CIO) in central IT
☐ First-line director in central IT
☐ Second-line manager in central IT
☐ Other (please specify)

4. How many total FTE IT security staff are employed by or contracted for in your institution? Include in this FTE count the time allocation of the person identified in question 1. If there are no FTE in a category, enter 0.

<table>
<thead>
<tr>
<th>FTE in central IT</th>
<th>Professional personnel</th>
<th>Student personnel</th>
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</thead>
<tbody>
<tr>
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<td>3</td>
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<tr>
<td>FTE in other administrative units</td>
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<td>FTE in other academic units</td>
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<td>Other (enter amounts here; describe other area below)</td>
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</table>

5. Which of the following are responsibilities of IT security in your institution? "IT security" here refers to the individual, or the unit led by the individual, identified in question 1.
- Acceptable use violation processing
- Answering/processing your abuse e-mail address
- DMCA (U.S. Digital Millennium Copyright Act) notices
- Disaster recovery/business continuity
- Firewall operation and management
- Forensic analysis
- Incident response, management and communication
- Intrusion detection system operation
- Liaison with law enforcement
- Malware identification and cleanup
- Netflow data collection and analysis
- PCI (payment card industry) compliance
- Penetration testing
- Regulatory compliance for central IT in general
- Review/signoff on IT procurements
- Review/signoff on security protocols in research projects
- Scanning the network for vulnerabilities
- Security awareness, education and training
- Selection of security software (AntiVirus, etc.)
- Other (please specify)
- Not applicable - none are the responsibility of IT security

6. Please indicate the status in your institution of the following identity management technologies.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Deployed broadly</th>
<th>Deployed sparsely</th>
<th>In planning</th>
<th>Considering</th>
<th>Considered, not pursued</th>
<th>No discussion to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biometrics</td>
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<td>Electronic signatures</td>
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<tr>
<td>Enterprise directory</td>
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<td>PKI</td>
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<td>Smart cards</td>
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<td>Tokens</td>
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<tr>
<td>Two-factor authentication</td>
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<tr>
<td>Other (select status here; describe other technology below)</td>
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</tbody>
</table>

Other technology
7. What is the status of end-user authentication for data network access in your institution? (Check all that apply.)

- [x] We currently require end-user authentication for all institutionally-provided wireless access
- [x] We have a separate authentication process for guest access to wireless
- [ ] We require end-user authentication only for access to institutional services
- [ ] We provide open access to the public Internet
- [x] We currently require end-user authentication for all wired access from public workstations
- [ ] We currently require end-user authentication for wired access from all workstations
- [ ] We are planning to require end-user authentication for all wireless access
- [ ] We are planning to require end-user authentication for all wired access
- [ ] We are considering an end-user authentication requirement for network access
- [ ] We have no plans for requiring end-user authentication for network access
- [x] We are a member of a federation such as InCommon and support inter-domain authentication
- [ ] Other (please specify) 
- [ ] Not applicable - no authentication exists

8. Which of the following apply at your institution regarding firewalls? (Check all that apply.)

- [x] Firewall at external Internet connection(s)
- [x] Firewalls around certain high-security servers or networks
- [x] Firewalls deployed by or on behalf of individual departments
- [ ] Firewall between campus network and residence hall network(s)
- [x] Personal firewall product deployed on workstations
- [x] Requirement that personal firewall product be turned on when connected to the institutional network
- [ ] A plan in place to implement one or more firewalls
- [ ] Other (please specify) 
- [ ] Not applicable - no firewalls exist
- [ ] Decline to answer - we are not comfortable revealing information about our firewall strategy

9. Which of the following IT security policies and practices apply at your institution? (Check all that apply.)
We require all of our critical systems to be expeditiously patched or updated

We require institutionally owned or leased computers to be expeditiously patched or updated

We require all personally owned computers to be expeditiously patched or updated

We conduct proactive scans to detect known security exposures in our critical systems

We conduct proactive scans to detect known security exposures in all institutionally owned or leased computers connected to our network

We conduct proactive scans to detect known security exposures in all personally owned computers connected to our network.

Our security system includes an intrusion detection system.

Our IT security personnel have the authority and ability to disable a network port in the event that a device has been detected to be violating institutional policy or disrupting network services

We require all institutionally owned portable devices to be encrypted

We require all institutionally owned portable devices containing sensitive information to be encrypted

Security assessments are required prior to licensing commercial software

Security assessments are required prior to contracting for hosted services

We have deployed DNSSEC (domain name system security extensions)

Other (please specify) ________

Not applicable - no security-related practices exist

Decline to answer - we are not comfortable revealing information about these security policies and practices

10. In which of these areas has your institution undertaken an IT security risk assessment within the past two years? (Check all that apply.)

Central IT systems and infrastructure
Central administrative systems and data
Medical center systems and data
Research systems and data
Instructional systems and data
Other (please specify) ________
Not applicable - no risk assessments have been undertaken

11. In which of these multi-institutional collaborations related to IT security does your institution participate? (Check all that apply.)

REN-ISAC (Research and Education Network Information Sharing and Analysis Center)
Public/private information sharing activities such as the U.S. FBI InfraGard program
Other (please specify) ________
EDUCAUSE
Not applicable - no collaborative participation

12. Federal cybersecurity professionals in the U.S. will soon be required to be professionally certified. Does your institution require certification for IT security personnel?

- Currently require certification
- Plan to require certification
- Not applicable - don't require certification and no plans to do so

ALL do have them through!

13. Please provide, in a paragraph or two, any background information about your institution and its IT security environment that could be useful to other CDS participants who may be using your data in their benchmarking. Example: Our affiliated hospital has its own information systems, network, and IT security staff, with whom we collaborate frequently. (optional)

14. Please provide the name and e-mail address of the person to contact regarding your institution's responses to this module of the CDS survey. (optional)

15. EDUCAUSE welcomes your feedback on this survey module. Please let us know of any technologies, innovations, or challenges important to your institution that are not addressed or are inadequately addressed in this year's survey. We'd also like to know if any questions in this module are not relevant to your institution. And how else could this module of the CDS survey be improved? (optional)
16. How easy was it for you to complete this module? Please take into consideration the amount of time it took, the ease of gathering information needed to answer the questions, the ease of identifying people at your institution to supply the answers, the clarity of the questions, etc. (optional)

- Very difficult
- Difficult
- Somewhat difficult
- Somewhat easy
- Easy
- Very easy
This module includes questions about characteristics of the institution’s information systems, regardless of whether they are operated or supported by central IT. In responding to the survey questions, please enter data that describe your “current” IT environment, unless a question specifically requests data for the prior fiscal year. This is an optional module. If you choose to complete this module, all questions are required unless otherwise noted.

1. Please complete the following grid regarding key information systems in your institution regardless of whether these systems are operated or supported by central IT.

* If you have not implemented and do not plan to implement a specified information system, please select “Not applicable - not provided” and do not select any other options for that system.
* For campuses within multcampus systems or districts, if an information system is or soon will be provided at the system or district level, enter the information requested for your campus but also select the “System office” option.
* For commercial software, select the “Vendor product” option and enter the name of vendor and product; for open source, select the “Open source” option and enter the product name; if developed in-house, select the “Homegrown” option.
* NOTE that you cannot enter a year in the future for “Year implemented;” for systems currently being implemented, enter the year implementation was begun.

<table>
<thead>
<tr>
<th>Provided at institution level</th>
<th>Type of system</th>
<th>Vendor name of application</th>
<th>Product name of application</th>
<th>Year implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution</td>
<td>System office</td>
<td>Enterprise</td>
<td>Not applicable - not provided</td>
<td>Vendor product</td>
</tr>
<tr>
<td>Student</td>
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<td>Financial</td>
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<td>Human</td>
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<td>Administration</td>
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<td>Library</td>
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<tr>
<td>Learning management</td>
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<td>Grants management (pre-award)</td>
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<tr>
<td>Grants management (post-award)</td>
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<td>Faculty management</td>
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<tr>
<td>Portal</td>
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<tr>
<td>Administrative data warehouse/RFID</td>
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<tr>
<td>Web content management</td>
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<td>Staff/faculty e-mail</td>
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<td>Student e-mail</td>
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<td>IT service desk/troubleshoot ticket</td>
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<tr>
<td>Customer relationship management (CRM)</td>
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<tr>
<td>Other select and enter responses here, describe other system below</td>
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</tbody>
</table>
2. Please indicate the strategies your institution has employed to date for implementing or converting the above information systems, and your preferred strategies for future (next 3 years) implementations or conversions. (Check all that apply.)

<table>
<thead>
<tr>
<th>Current Strategy</th>
<th>Future Strategy</th>
<th>Not applicable - strategy not employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop systems in house (homegrown)</td>
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<tr>
<td>Develop systems in partnership with a vendor</td>
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<tr>
<td>Purchase a commercial product with minimal customization</td>
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<tr>
<td>Purchase a commercial product with substantial customization</td>
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<tr>
<td>Use an open source product with minimal customization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use an open source product with substantial customization</td>
<td></td>
<td></td>
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<tr>
<td>Select best-of-breed applications</td>
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<tr>
<td>Select a package of integrated systems</td>
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<tr>
<td>Enhance legacy systems and provide with interfaces</td>
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<tr>
<td>Outsource systems</td>
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<tr>
<td>Other (select options here; describe other strategy below)</td>
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</tbody>
</table>

Other strategy

3. What is the overall status of the deployment and use of your institution's information systems?
4. Please provide, in a paragraph or two, any background information about information and ERP systems that could be useful to other CDS participants who may be using your data in their benchmarking. Examples: We are migrating from commercial to open source for our course management system. We recently issued an RFP for a new integrated library system. (optional)

Clemson is at the initiating stage of moving our homegrown COBOL student system to Banner (SCT). Clemson is at the initiating stage of assessing Kuali Cores as our grants/sponsored program solution. Human resource is doing a functional upgrade to use more delivered features and functionality from PeopleSoft HCMS.

5. Please provide the name and e-mail address of the person to contact regarding your institution's responses to this module of the CDS survey. (optional)

6. EDUCAUSE welcomes your feedback on this survey module. Please let us know of any technologies, innovations, or challenges important to your institution that are not addressed or are inadequately addressed in this year's survey. We'd also like to know if any questions in this module are not relevant to your institution. And how else could this module of the CDS survey be improved? (optional)

7. How easy was it for you to complete this module? Please take into consideration the amount of time it took, the ease of gathering information needed to answer the questions, the ease of identifying people at your institution to supply the answers, the clarity of the questions, etc. (optional)

- Very difficult
- Difficult
- Somewhat difficult
EDUCAUSE Core Data Service Module 9: Central IT Engagement with Other Departments

This module includes questions about organizational relationships between central IT and other administrative units that also provide IT or IT-related services. In responding to the survey questions, please enter data that describe your "current" IT environment, unless a question specifically requests data for the prior fiscal year. This is an optional module. If you choose to complete this module, all questions are required unless otherwise noted.

1. What is the relationship of the following departments, programs, or units to central IT? For the purposes of this question, "administrative information systems/ERP" refers to the unit that focuses on the functionality of the applications software (design, development, testing, maintenance, etc.). These functions are conceptually distinct from systems operation and from the various "functional" responsibilities that are typically vested in offices of student affairs, financial affairs, and so forth.

<table>
<thead>
<tr>
<th>Component or department/unit</th>
<th>Component of central IT</th>
<th>Dotted-line report to central IT</th>
<th>Separate from central IT</th>
<th>Not applicable - no department, program, or unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative information systems/ERP</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center for technology-enhanced learning (or equivalent)</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Distance learning</td>
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<td>X</td>
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<tr>
<td>Faculty teaching excellence center (or equivalent)</td>
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<td>X</td>
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<tr>
<td>High-performance computing/supercomputing</td>
<td>X</td>
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<tr>
<td>Institutional research</td>
<td>X</td>
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<tr>
<td>IT security</td>
<td>X</td>
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<td>Libraries</td>
<td>X</td>
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<td>Telephone services</td>
<td>X</td>
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<tr>
<td>Institutional web design</td>
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<tr>
<td>Other (select relationship here; describe other department/program/unit below)</td>
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</table>

2. For those departments, programs, or units that are "dotted-line" or separate, how is central IT engaged, if at all? (Check all that apply.)
<table>
<thead>
<tr>
<th>Administrative Information</th>
<th>Central IT offers joint services with this unit</th>
<th>Central IT provides no-charge services to this unit</th>
<th>Central IT provides fee-based services to this unit</th>
<th>Central IT is represented on this unit's advisory council(s)</th>
<th>This unit provides no-charge services to central IT</th>
<th>This unit provides fee-based services to central IT</th>
<th>This unit is represented on central IT's advisory council</th>
<th>Not applicable - component of central IT or no department/program/unit</th>
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</thead>
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<tr>
<td>Center for technology enhanced learning (or equivalent)</td>
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<td>Distance learning</td>
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<td>Faculty teaching excellence center (or equivalent)</td>
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<tr>
<td>High-performance computing/super computing</td>
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<tr>
<td>Institutional research</td>
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<td>IT security</td>
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<td>Telephone services</td>
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<td>Institutional web design</td>
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<tr>
<td>Other (select engagement status here, describe other department/program/unit below)</td>
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Other department/program/unit

3. How has the relationship between central IT and these departments, programs, or units changed in the recent past?
<table>
<thead>
<tr>
<th>Administrative information systems/ERP</th>
<th>Added to central IT in past 2-3 years</th>
<th>Added to central IT in past year</th>
<th>Detached from central IT in past 2-3 years</th>
<th>Detached from central IT in past year</th>
<th>No change</th>
<th>Not applicable - no department/program/unit</th>
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</thead>
<tbody>
<tr>
<td>Center for Technology Enhanced Learning (or equivalent)</td>
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<tr>
<td>Distance Learning</td>
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<tr>
<td>Faculty Teaching Excellence Center (or equivalent)</td>
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<td>High-performance computing/supercomputing</td>
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<tr>
<td>Institutional Research</td>
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<td>IT Security</td>
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<td>Telephone Services</td>
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<tr>
<td>Institutional Web Design</td>
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<tr>
<td>Other (select change status here; describe other department/program/unit below)</td>
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</table>

Other department/program/unit

---

4. Please provide, in a paragraph or two, any background information about central IT relationships that could be useful to other CDS participants who may be using your data in their benchmarking. Examples: Web design and top-level content detached from central IT 2 years ago; operation and consulting on use of the content management system remain with central IT. (optional)

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5. Please provide the name and e-mail address of the person to contact regarding your institution's responses to this module of the CDS survey. (optional)
6. EDUCAUSE welcomes your feedback on this survey module. Please let us know of any technologies, innovations, or challenges important to your institution that are not addressed or are inadequately addressed in this year’s survey. We’d also like to know if any questions in this module are not relevant to your institution. And how else could this module of the CDS survey be improved? (optional)

[Signature]

7. How easy was it for you to complete this module? Please take into consideration the amount of time it took, the ease of gathering information needed to answer the questions, the ease of identifying people at your institution to supply the answers, the clarity of the questions, etc. (optional)

- Very difficult
- Difficult
- Somewhat difficult
- Somewhat easy
- Easy
- Very easy
This module includes questions about the extent and characteristics of the Institution's distributed IT (IT services provided by units other than central IT). For respondents within system or district offices, responses should refer exclusively to the system office, not between the system office and component campuses. In responding to the survey questions, please enter data that describe your "current" IT environment, unless a question specifically requests data for the prior fiscal year. This is an optional module. If you choose to complete this module, all questions are required unless otherwise noted.

1. Which, if any, IT functions are provided by the following administrative offices delivered either to their own personnel and programs or to others units in the Institution, or beyond? (Check all that apply.)

If, for example, central IT reports to the Executive VP, indicate for that line only IT functions provided by other personnel in the Executive VP's office. Also, do not indicate functions provided by an office if central IT provides the function within that office on a contract basis. In the case of the Provost or VPVC for Academic Affairs, consider only activities within this administrative office, not the activities in the various academic units reporting to it. VP stands for vice president; VC stands for vice chancellor.

<table>
<thead>
<tr>
<th>Deskptop Support</th>
<th>Help Desk</th>
<th>IT Security</th>
<th>Tel/Online data account management</th>
<th>In-building Data Networking/Wireless</th>
<th>Data Center</th>
<th>Email/Telecommunications</th>
<th>Enterprise Application Support</th>
<th>Enterprise Application Development</th>
<th>Call Center Support</th>
<th>Support for Advanced Academic Research</th>
<th>Support for Student Affairs</th>
<th>Other (e.g., library)</th>
<th>Support for Other (please specify)</th>
<th>Other (please specify)</th>
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</thead>
<tbody>
<tr>
<td>President/Chancellor's Office</td>
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<td>VPVC for Financial Affairs</td>
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<td>VPVC for Medical Affairs</td>
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<td>UPVC for Research</td>
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<td>VPVC for Advancement/Alumni Affairs</td>
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<tr>
<td>Other (select functions here; describe other unit below)</td>
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</tbody>
</table>
2. How does central IT provide services to the following administrative units?

<table>
<thead>
<tr>
<th>Administrative Unit</th>
<th>Standard services, no charge</th>
<th>Standard services, no charge</th>
<th>Specialized services, no charge</th>
<th>Specialized services, not shared</th>
<th>No services provided</th>
<th>Not applicable for unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>President / Chancellor's Office</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Provost or VPUC for Academic Affairs</td>
<td>X</td>
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<tr>
<td>Provost or VPUC</td>
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<tr>
<td>VPUC for Administration Affairs</td>
<td>X</td>
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<tr>
<td>VPUC for Finance Affairs</td>
<td>X</td>
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<tr>
<td>VPUC for Medical Affairs</td>
<td>X</td>
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<tr>
<td>VPUC for Research</td>
<td>X</td>
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<tr>
<td>VPUC for Student Affairs</td>
<td>X</td>
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<tr>
<td>VPUC for Legal Affairs</td>
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<tr>
<td>VPUC for Advancement/Affairs*</td>
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<tr>
<td>VPUC for Public Affairs</td>
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<tr>
<td>Library</td>
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<tr>
<td>Other (select service here, describe other unit below)</td>
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</table>

3. Which, if any, IT functions are provided by the following academic units? (Check all that apply.)

For smaller institutions with no separate colleges or schools, please assign distributed functions to the academic category that best matches the character of your institution (e.g., Arts and Sciences, Business/Management, Engineering).
4. How does central IT provide services to the following academic units?
Note: Fees are paid in the form of support staff positions funded by the academic unit, not a fund transfer. College & non-academic units enter into a SLA for desktop support. Some colleges provide their own desktop support, services such as instructional design, email, and networking are funded and provided centrally.

5. Please provide, in a paragraph or two, any background information about your institution's distributed IT that could be useful to other CDS participants who may be using your data in their benchmarking. Examples: The veterinary campus is 30 miles from the main campus. The three largest colleges tend to be more self-sufficient, while central IT provides a fuller range of services to the smaller colleges. (optional)

College & non-academic units enter into a SLA for desktop support. Some colleges provide their own desktop support. Services such as instructional design, email, and networking are funded and provided centrally.

6. Please provide the name and e-mail address of the person to contact regarding your institution's responses to this module of the CDS survey. (optional)
7. EDUCAUSE welcomes your feedback on this survey module. Please let us know of any technologies, innovations, or challenges important to your institution that are not addressed or are inadequately addressed in this year's survey. We'd also like to know if any questions in this module are not relevant to your institution. And how else could this module of the CDS survey be improved? (optional)

8. How easy was it for you to complete this module? Please take into consideration the amount of time it took, the ease of gathering information needed to answer the questions, the ease of identifying people at your institution to supply the answers, the clarity of the questions, etc. (optional)

- Very difficult
- Difficult
- Somewhat difficult
- Somewhat easy
- Easy
- Very easy
EDUCAUSE Core Data Service Module 11: Central Offices of Multicampus Systems/Districts

This module includes questions about the configuration of the multicampus system or community college district, and the role of central IT and other system office departments in provision of IT services and policy. In responding to the survey questions, please enter data that describe your current IT environment, unless a question specifically requests data for the prior fiscal year. This module is required for system and district offices. If you choose to complete this module, all questions are required unless otherwise noted.

1. How many degree-granting “component” institutions of each of the following Carnegie classifications comprise your multicampus system? Enter the number of campuses in each Carnegie classification, totaling to the number of campuses in your system. If there are no institutions in a classification, enter 0.

Systems outside the U.S. are asked to classify their components according to the Carnegie Classification of Institutions of Higher Education (Year 2000 version), summarized at http://www.educause.edu/Carnegie2000.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Count</th>
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</thead>
<tbody>
<tr>
<td>Doctoral/Research Universities-Extensive (DR EXT)</td>
<td></td>
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<tr>
<td>Doctoral/Research Universities-Intensive (DR INT)</td>
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<tr>
<td>Master’s Colleges and Universities I (MA I)</td>
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<tr>
<td>Master’s Colleges and Universities II (MA II)</td>
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<tr>
<td>Baccalaureate Colleges-Liberal Arts (BA LA)</td>
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<tr>
<td>Baccalaureate Colleges-General (BA GEN)</td>
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<tr>
<td>Baccalaureate/Associate’s Colleges (BA AA)</td>
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<tr>
<td>Associate’s Colleges (AA)</td>
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<tr>
<td>Theological seminaries and faith-related institutions (FAITH)</td>
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<tr>
<td>Medical schools and medical centers (MED)</td>
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<tr>
<td>Other separate health profession schools (HEALTH)</td>
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<tr>
<td>Schools of engineering and technology (ENGR)</td>
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</tbody>
</table>

1 of 7
2. Please list here any other entities within your system or district, such as secondary schools, national laboratories, observatories, etc., if applicable. (optional)

3. How are central IT staff in the system office allocated between support for component campuses and support for the system office?

Some staff could be dedicated to campus support, such as course management system administrators. Others could be dedicated to the system office, including desktop and LAN support specialists. For those providing services to both campuses and to the system office (financial systems or wide area networking staff, perhaps), please assign appropriate allocations.

4. Does your system office provide any of the following services to campuses in your system or district?
<table>
<thead>
<tr>
<th>Service Area</th>
<th>System Office is the exclusive provider for all campuses</th>
<th>System Office is one of several providers for one or more campuses</th>
<th>Not applicable - service is not provided by the system office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration of central IT organization</td>
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<tr>
<td>IT policy</td>
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<tr>
<td>IT security</td>
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<tr>
<td>Project management/Business process/Systems analysis</td>
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<tr>
<td>Admin info systems/ERP - Finance</td>
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<td>Admin info systems/ERP - HR</td>
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<tr>
<td>Admin info systems/ERP - Student</td>
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<tr>
<td>Admin info systems/ERP - Alumni/Advancement/Fundraising</td>
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<tr>
<td>Admin info systems/ERP - Other (facilities, grants management, etc.)</td>
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<tr>
<td>Business intelligence/Data administration/Data warehouse</td>
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<tr>
<td>Help desk</td>
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<tr>
<td>Desktop computing, user support, training, computer store</td>
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<tr>
<td>Student technology (labs, training, support, etc.)</td>
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<tr>
<td>Faculty instructional technology/CMS/UMS support</td>
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<tr>
<td>Classroom and learning space support</td>
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<tr>
<td>Multimedia services</td>
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<tr>
<td>Distance education</td>
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<tr>
<td>Network infrastructure &amp; services</td>
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<td>Telephony</td>
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<td>Data center, operations</td>
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<tr>
<td>Enterprise Infrastructure and services; identity management</td>
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<td>Research technology services</td>
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<td>Web support services</td>
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<tr>
<td>Other (select responses here; describe other service below)</td>
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</table>

**Other service**
5. How does your system office provide the following services to campuses in your system or district?

<table>
<thead>
<tr>
<th>Service is provided by central IT in the system office</th>
<th>Service is provided by another department in the system office</th>
<th>Service is outsourced to one of the campuses in our system or district</th>
<th>Service is outsourced to a commercial or other external provider</th>
<th>Not applicable - service is not provided by the system office</th>
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</thead>
<tbody>
<tr>
<td>Administration of central IT organization</td>
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<td>Admin info systems/ERP - Finance</td>
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<td>Admin info systems/ERP - HR</td>
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<td>Admin info systems/ERP - Student</td>
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<td>Admin info systems/ERP - Alumni/Advancement/Fundraising</td>
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<td>Admin info systems/ERP - Other (facilities, grants management, etc.)</td>
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<tr>
<td>Business intelligence/Data administration/Data warehouse</td>
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<td>Help desk</td>
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<tr>
<td>Desktop computing, user support, training, computer store</td>
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<tr>
<td>Student technology (labs, training, support, etc.)</td>
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5. (continued)
<table>
<thead>
<tr>
<th>Service provided by central IT in the system office</th>
<th>Service is provided by another department in the system office</th>
<th>Service is outsourced to one of the campuses in our system or district</th>
<th>Service is outsourced to a commercial or other external provider</th>
<th>Not applicable - service is not provided by the system office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty instructional technology/CMS/LMS support</td>
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<td>Classroom and learning space support</td>
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<td>Multimedia services</td>
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<td>Other (select responses here; describe other service below)</td>
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</table>

Other service

6. What is the relationship between your office and the office of the state or provincial CIO or other relevant government IT official, if any? (optional)
7. Please provide, in a paragraph or two, any background information about your system or district and its organization and delivery of IT services that could be useful to other CDS participants who may be using your data in their benchmarking. Examples: A sixth college will open next year with 1,000 students, to be expanded to 5,000 within 5 years. The district has just leased dark fiber to build a dedicated data network connecting all campuses. (optional)

8. Please provide the name and e-mail address of the person to contact regarding your institution’s responses to this module of the CDS survey. (optional)

9. EDUCAUSE welcomes your feedback on this survey module. Please let us know of any technologies, innovations, or challenges important to your institution that are not addressed or are inadequately addressed in this year’s survey. We’d also like to know if any questions in this module are not relevant to your institution. And how else could this module of the CDS survey be improved? (optional)
10. How easy was it for you to complete this module? Please take into consideration the amount of time it took, the ease of gathering information needed to answer the questions, the ease of identifying people at your institution to supply the answers, the clarity of the questions, etc. (optional)

- Very difficult
- Difficult
- Somewhat difficult
- Somewhat easy
- Easy
- Very easy
EDUCAUSE Core Data Service Module 12: International

This module includes questions about the international characteristics of the institution, including currency and conversion rates and institution’s best fit into the U.S. Carnegie Classifications. This module is required for international institutions. If you complete this module, all questions are required unless otherwise noted.

1. In which country is your institution primarily located? If your institution has campuses in multiple countries, please indicate here the country of your principal campus.

- AE United Arab Emirates
- AU Australia
- BE Belgium
- BM Bermuda
- BR Brazil
- BY Belarus
- CA Canada
- CH Switzerland
- CL Chile
- CN China
- CO Colombia
- CY Cyprus
- DE Germany
- DK Denmark
- EG Egypt
- ES Spain
- FI Finland
- GR Greece
- GU Guatemala
- HK Hong Kong
- IE Ireland
- IL Israel
- IN India
- IS Iceland
- JP Japan
- KE Kenya
- KR Korea
- LB Lebanon
- LV Latvia
- MX Mexico
- NL Netherlands
- NO Norway
- NZ New Zealand
- PE Peru
- PL Poland
- QA Qatar
- RU Russian Federation
- SA Saudi Arabia
- SE Sweden
- SG Singapore
- TH Thailand
- TR Turkey
- TT Trinidad and Tobago
- UK United Kingdom
- ZA South Africa
- Other (please specify) [ ]

2. In what city or town is your institution’s principal campus located?
3. In what province, state, or other sub-national unit is your institution's principal campus located?

☐ Province, state, or other subnational unit
☐ Not applicable - no unit

4. If your institution operates campuses in countries other than the country where your primary campus is located, please indicate these countries below. (Check all that apply.)

☐ AE United Arab Emirates ☐ FI Finland ☐ NO Norway
☐ AU Australia ☐ FR France ☐ NZ New Zealand
☐ BE Belgium ☐ GR Greece ☐ PE Peru
☐ BM Bermuda ☐ GU Guatemala ☐ PL Poland
☐ BR Brazil ☐ HK Hong Kong ☐ QA Qatar
☐ BY Belarus ☐ IE Ireland ☐ RU Russian Federation
☐ CA Canada ☐ IL Israel ☐ SA Saudi Arabia
☐ CH Switzerland ☐ IN India ☐ SE Sweden
☐ CL Chile ☐ IS Iceland ☐ SG Singapore
☐ CN China ☐ JP Japan ☐ TH Thailand
☐ CO Colombia ☐ KE Kenya ☐ TR Turkey
☐ CY Cyprus ☐ KR Korea ☐ TT Trinidad and Tobago
☐ DE Germany ☐ LB Lebanon ☐ UK United Kingdom
☐ DK Denmark ☐ LV Latvia ☐ ZA South Africa
☐ EG Egypt ☐ MX Mexico ☐ Other (please specify)
☐ ES Spain ☐ NL Netherlands ☐ Not applicable - no campuses in other countries

5. Please indicate the official language(s) of your institution. (Check all that apply.)
6. What is the name of your country's currency?

- AED UAE Dirham
- AUD Australian Dollar
- BMD Bermudian Dollar
- BRL Brazilian Real
- BYR Belarusian Ruble
- CAD Canadian Dollar
- CHF Swiss Franc
- CLP Chilean Peso
- CNY Chinese Yuan Renminbi
- COP Colombian Peso
- DKK Danish Krone
- EGP Egyptian Pound
- EUR Euro
- GBP United Kingdom Pound
- GTQ Guatemalan Quetzal
- HKD Hong Kong Dollar
- ILS Israeli New Shekel
- INR Indian Rupee
- ISK Icelandic Krona
- JPY Japanese Yen
- KES Kenyan Schilling
- KRW Korean Won
- LBP Lebanese Pound
- LVL Latvian Lats
- MXN Mexican Peso
- NOK Norwegian Krone
- NZD New Zealand Dollar
- PEN Peruvian Nuevo Sol
- PLN Polish Zloty
- QAR Quatari Rial
- RUB Russian Ruble
- SAR Saudi Riyal
- SEK Swedish Krona
- SGD Singapore Dollar
- THB Thai Baht
- TRY Turkish Lira
- TTD Trinidad and Tobago Dollar
- USD US Dollar
- ZAR South African Rand
- Other (please specify)

7. What exchange rate did you use to convert your local currency to USD for financial data?
8. What is the source of the last FY currency exchange rate (publication, government agency, etc.)? Provide URL if possible.


9. What is the source of the current FY currency exchange rate (publication, government agency, etc.)? Provide URL if possible.


10. Into which of the Carnegie Classifications of Institutions of Higher Education (Year 2000 version) would your institution best fit if this classification scheme were extended beyond the U.S. to other nations? For definitions, see http://www.educause.edu/Carnegie2000. (optional)

- Doctoral/Research Universities--Extensive (DR EXT)
- Doctoral/Research Universities--Intensive (DR INT)
- Master's Colleges and Universities I (MA I)
- Master's Colleges and Universities II (MA II)
- Baccalaureate Colleges--Liberal Arts (BA LA)
- Baccalaureate Colleges--General (BA GEN)
- Baccalaureate/Associate's Colleges (BA AA)
- Associate's Colleges (AA)
- Theological seminaries and faith-related institutions (FAITH)
- Medical schools and medical centers (MED)
- Other separate health profession schools (HEALTH)
- Schools of engineering and technology (ENGR)
- Schools of business and management (BUS)
- Schools of art, music, and design (ART)
- Schools of law (LAW)
- Teachers colleges (TEACH)
- Tribal colleges and universities (TRIBAL)
- Other specialized institutions (OTHER)
- Not applicable

11. Please indicate the type of institutional control that applies to your institution.

- Public
- Private not-for-profit
- Private for-profit
- Other (please specify)

12. How many full- and part-time graduate and undergraduate students were enrolled in your institution during the most recent semester or term? If you have no students in a category, please
enter 0.

<table>
<thead>
<tr>
<th>Undergraduate</th>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. How many FTE employees, including faculty, does your institution have?


14. What was the actual total of expenses (in USD), not including student financial aid, for your institution during the last FY?


15. Is your institution a member of any of the following higher education IT organizations or consortia? (Check all that apply.)

- [ ] CAUDIT (Australia and New Zealand)
- [ ] CUCCIO (Canada)
- [ ] JISC (United Kingdom)
- [ ] LERU (League of European Research Universities)
- [ ] SURF (Netherlands)
- [ ] SWITCH (Switzerland)
- [ ] UNIVERSIA (IberoAmerica)
- [ ] Other (please specify)
- [ ] Not applicable

16. Please provide, in a paragraph or two, any background information about higher education in your country that could be useful to CDS participants from other nations who may be using your data in their benchmarking. Examples could include the structure and funding of federal and/or state higher education sectors; important government policies or recent reports concerning higher education and IT. Include URLs if appropriate. (optional)


17. Please provide the name and e-mail address of the person to contact regarding your institution's responses to this module of the CDS survey. (optional)

18. EDUCAUSE welcomes your feedback on this survey module. Please let us know of any technologies, innovations, or challenges important to your institution that are not addressed or are inadequately addressed in this year's survey. We'd also like to know if any questions in this module are not relevant to your institution. And how else could this module of the CDS survey be improved? (optional)

19. How easy was it for you to complete this module? Please take into consideration the amount of time it took, the ease of gathering information needed to answer the questions, the ease of identifying people at your institution to supply the answers, the clarity of the questions, etc. (optional)

- Very difficult
- Difficult
- Somewhat difficult
- Somewhat easy
- Easy
- Very easy
EDUCAUSE Core Data Service Glossary

Academic Department

Beyond the traditional notion of an academic department as a distinct disciplinary academic entity, the term as used in the CDS is intended to include a fuller scope of academic units, from schools and colleges on one end to research groups at the other. The distinguishing attribute is that the entity includes teaching and research faculty, associated staff, and academic administrators (for example, deans).

Administration of Central IT Organization, IT Planning & Budgeting, Technology R&D

Please include the following in this area if applicable:

- Financial planning and management for IT
- Institutional IT planning
- IT communications and publications
- Human resource management for the IT organization
- Facilities management for the IT organization
- Advanced technology, technology R&D
- Staff who support these functions (administrative and clerical)
- CIO or CTO position

Administrative Office

Units in the central administration of a college or university, such as the offices of the president, vice presidents, provost, vice provosts, and general counsel. Does not include academic units, such as offices of the deans in universities with multiple colleges or schools, or offices of academic departments or research groups.

Administrative/Enterprise Information Systems

Administrative / enterprise information systems include legacy administrative systems or enterprise resource planning (ERP) systems such as student administration (admissions, financial aid, registration, etc.), financial information systems, procurement systems, human resource systems, payroll, research administration (grants and contracts), and library systems (if supported by the IT organization). Please include the following in this area if applicable:

- Development and implementation of these systems
- Maintenance of these systems
- Training of users of these systems
- Programming support related to these systems
- Database / data administration
- Hardware, software, staff, and other infrastructure needed to support these systems
Alumni/Advancement/Fundraising (Information System)

An information system used to target, analyze, record, and report on the status of institutional fundraising from such sources as alumni, parents, friends, foundations, and corporations.

American College and University Presidents’ Climate Commitment

A statement signed by over 650 U.S. colleges and university presidents and several from other countries committing their institutions to initiate development of a comprehensive plan to achieve climate neutrality as soon as possible, and to initiate two or more tangible actions to reduce greenhouse gases.

Best Effort Support

With reference to help desk and other support services, best effort indicates that first-level support personnel may not be fully trained, that escalation of issues to more expert personnel may not be available, and that users should expect some problems will not be resolved. Compare to “Full Service.”

Biometrics

In computer security, biometrics refers to authentication techniques that rely on measurable physical characteristics that can be automatically checked. Examples include retinal scans, computer analysis of fingerprints or speech, or other physiological means of user identification for security purposes.

Blogs

Refers to Web logs that are analogous to personal online diaries in which individuals share their observations and opinions.

Broadband

In the human resources context, broadband refers to an approach to job classification and pay structure that is broader and flatter than traditional systems, characterized by wider salary ranges and fewer job titles and vertical levels.

Business Intelligence/Data Administration/Data Warehouse

A set of administrative functions and associated software systems that support planning and decision making by categorizing, aggregating, analyzing, and reporting on data resulting from transaction-processing systems.
Cabinet

The administrative leaders who meet regularly as a group with the institution’s chief executive officer. The cabinet may be all administrators who report directly to the CEO, or it may be a larger or smaller group.

Campus Electrical Generation

Provision of electrical power across an entire campus or large parts thereof that is generated by and for the institution, as distinct from a dedicated onsite generator for a specific facility, such as a data center.

Capital Appropriation

Appropriation to the central IT organization from the institutional capital budget to fund major purchases and implementations such as networks, ERP systems, and buildings. Do not include capital appropriations amortized through rates; an example of a capital appropriation amortized through rates would be funds derived from taking out a loan or drawing on the institution’s endowment for an initiative such as a major network enhancement or a phone switch. Such special funds require payback and are usually repaid through a fee structure.

Carbon Neutrality

Achieving net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount sequestered or offset, or buying enough carbon credits to make up the difference. The concept may be extended to include other greenhouse gases measured in terms of their carbon dioxide equivalence. (From http://en.wikipedia.org/wiki/Carbon_neutrality.)

Carnegie Classifications (Year 2000 Version)


Central IT

The centralized information technology services and support organization reporting to the highest-ranking information technology administrator/officer in the institution.
Central Office

In multi-campus university systems or community college districts, the central administrative unit headed by the chief executive officers of the system or district. Most central offices include a central IT organization, some of which provide a wide range of services to individual campuses and some of which focus on coordinating the activities of IT organizations on the campuses.

Chancellor

In some multi-campus systems and community college districts in the U.S., chancellor is the title of the chief executive officer of the system or district, in which case the campus CEOs carry the title of president. In other cases, the president is the system CEO, with the campus CEOs designated as chancellors.

Chief Information Officer (CIO)

A common designation for the highest-ranking information technology officer/administrator in an institution, and sometimes an official title. Given the wide range of actual titles, the CDS sometimes uses "CIO" to refer to all highest-ranking IT officers and administrators, regardless of their official titles. See also "Office of the CIO."

Chief Technology Officer (CTO)

One of several official titles for the highest-ranking information technology officer/administrator in colleges and universities. In some cases, CTO is the title assigned to a deputy to the highest ranking technology officer/administrator.

Classroom and Learning Space Support

Provision of technology resources and support services in classrooms and other spaces, real and virtual, that are dedicated to teaching and learning.

Commodity Internet

A general term referring to the general public network known as the Internet, as distinct from special-purpose and restricted-access research and education (R&E) networks. Many universities and colleges have connections to both the commodity Internet and one or more R&E networks.

Commodity Peering

An approach to provisioning commodity Internet service using excess capacity available on research and education (R&E) networks that connect at major interconnect (peering) points on the commodity Internet. The goals of commodity peering are to improve
network performance and reduce costs.

Communications Infrastructure Services (Aggregation)

For the convenience of smaller institutions, the CDS provides the option of aggregating staff and student personnel FTE counts for the two communications infrastructure functions: network infrastructure and services; and telephony. Larger institutions, however, are strongly encouraged to break out staff and student counts at the more granular level.

Component Campus

Designation for institutions that are included in multi-campus systems and community college districts.

Computer Lab or Cluster

One or more computers provided by the institution for shared student use. Most labs or clusters provide seating and are intended for extended use. Compare to "Kiosks."

Computers

For the purposes of the CDS, "computers" are considered to include servers, desktop computers, and laptop computers, but not tablets, e-book readers, personal digital assistants, or smartphones.

Consultants

Refers to individuals or a firm that advises or consults with the institution about information technology plans or directions, either in general or with regard to a specific technology implementation or project.

Contractors

Refers to employees with whom the institution contracts to provide IT infrastructure and/or specific IT services that might otherwise be delivered by inhouse IT staff. Consultants are not to be included in the "contractors" category. If your institution outsources all or nearly all IT services and the outsourcer provides staff on site, please count these employees as staff as opposed to contractors.

Conversion Rate for Currency

Since all financial data in CDS survey modules are in U.S. dollars, participants outside the United States are asked to provide the conversion rates from local currency to U.S. dollars used for both the prior fiscal year and the current fiscal year.
Course Management System

See Learning Management System.

Current Fiscal Year

Unless otherwise indicated, the CDS requests that data provided by institutions describe the current fiscal year. In the United States, most higher education fiscal years begin in July, August, or September; accounting practices vary internationally.

Customer Relationship Management (Information System)

Strategy, business processes, and software for managing and enhancing an institution's interactions with customers, such as students, prospective students, and alumni; faculty and staff; and current and prospective donors.

Cyberinfrastructure (CI)

The distributed computer, information, and communication technologies combined with the personnel and integrating components that provide a long-term platform to empower the modern scientific research endeavor. Components of CI include high-performance computing, storage resources, visualization facilities, sensors and other data collection apparatus, and advanced networks. In some countries, CI is referred to as E-Science. (From http://www.nsf.gov/od/oci/reports/toc.jsp.)

Data Center, Operations

Please include the following in this area if applicable:

- Systems administration and operation
- System backups
- Data center environmental support systems such as HVAC, UPS and backup power supply, and systems monitor
- Staff, hardware, and software affiliated with these functions

Dedicated Onsite Electrical Generator

A source of electrical power for a data center or other facility, separate from the campus or public electrical grid. Dedicated generators are often used to back up other sources of electrical power; some are permanently installed, and others are mobile.

Desktop Computing, User Support Services, Training, Computer Store

Please include the following in this area if applicable:

- Desktop computer technical analysis and consulting staff
- Computer resale activities and staff
Digital Millennium Copyright Act (DMCA)

A U.S. copyright law, enacted in 1998, that implements two 1996 treaties of the World Intellectual Property Organization (WIPO). The DMCA extended the reach of copyright and increased penalties for infringement via the Internet while limiting the liability of Internet service providers, including colleges and universities. The 2001 European Union Copyright Directive (UED) and Electronic Commerce Directive addressed some of the same issues as the DMCA.

Distance Education

Teaching methods and associated technology that enable students to access instruction and instructional resources without being in the same educational setting as the instructor. Models for distance education include distributed students with real-time or asynchronous access to an instructor, other students, or online materials; students assembled in a classroom with a remote instructor; students and instructor(s) in multiple classrooms connected simultaneously; and other variations.

Distributed Antenna System (DAS)

A network of spatially separated antenna nodes that provides wireless services within a campus, building, or other area. One application of a DAS is to enhance cellular telephony service in an institution while maintaining institutional control of the antenna infrastructure.

District

A group of community colleges with a common governing board. Analogous to a multi-campus system.

Domain Name System Security Extensions (DNSSEC)

A suite of specifications for securing key information provided by the Domain Name System of Internet Protocol (IP) networks, including origin authentication, authenticated denial of existence, and data integrity.
Dotted-Line Report to Central IT

Refers to a management structure in which a unit reports primarily to an authority outside of Central IT, with a secondary line of reporting and responsibility to Central IT.

E-Learning

Refers to learning content or interaction that is facilitated electronically, such as delivery of digital content or use of threaded online discussion.

E-Portfolios

An e-portfolio is a digitized collection of artifacts used to document accomplishments of an individual or institution. The collection may contain text-based, graphic, or multimedia elements archived on a website or on other electronic media such as a CD-ROM or DVD. E-portfolios can be used as a tool in student advising, to document learning outcomes and institutional quality for accreditation, or to demonstrate accomplishments for career searches.

E-Science

See Cyberinfrastructure (CI)

Educational Technology Services (Aggregation)

For the convenience of smaller institutions, the CDS provides the option of aggregating staff and student personnel FTE counts for all five educational technology services functions: student technology; faculty instructional technology/LMS support; classroom and learning space support; multimedia services; and distance education. Larger institutions are strongly encouraged to break out staff and student counts at the more granular level, however.

Electronic Signatures

Refers to data appended to a message or document that authenticates the identity of the message sender or document signer to ensure that the message or document content has not been changed in the transmission process.

Enterprise Directory

Refers to a database where different types of identifiers are correlated to support identity management, authentication, authorization, and other services.

Enterprise Infrastructure and Services, Identity Management

Please include the following in this area if applicable:
- Portal development and support
- Middleware development and support
- Security infrastructure development and support
- Service-oriented architecture (web services) development and support
- Identity management
- E-mail
- Staff, hardware, and software to support enterprise infrastructure

Enterprise Resource Planning (ERP)

Refers to an integrated suite of administrative information systems designed to support and automate business processes through a centralized database system. In higher education, these systems usually include student systems, financial systems, and human resources (payroll/personnel) systems, as well as data warehouse and planning tools.

External Modules

Refers to modules that are not part of the core application suite, that is, a module that you create or purchase that allows you more functionality than the core application.

Faculty Instructional Technology/LMS Support

Support for faculty development and use of educational technology and digital information resources, except for services associated with classroom and learning space support. Includes:

- Learning (course) management systems (homegrown or purchased)
- Specialized training and support for faculty
- Instructional support staff (including technologists and designers)
- Teaching and technology center staff

Finance (Information System)

Software supporting the financial operations of the institution, including general ledger, purchasing, accounts payable, accounts receivable, budgeting, and so forth.

Firewall

Refers to a set of related programs and policies that protects the resources of a private network from users on other networks. A firewall can also control what outside resources users of the private network can access.

Full Service Support

With reference to help desk and other support services, full service indicates that the system or service is on an official "supported list" or the equivalent, with appropriate
user documentation, training for support personnel, interoperability testing, and so forth. Compare to "Best Effort."

Full-time Equivalent (FTE)

A combination of full- and part-time personnel (or enrolled students) into a single measure as determined by formula. For non-student personnel counts in the CDS, please calculate FTE based on a 40-hour work week over the course of the full FY (or approximately 2,000 hours per year). For student employees, a simple formula for calculating FTE might be to take the number of students employed times the number of hours per week they work times the number of weeks a year they work and divide that total by 2,000.

Funding Model

The formulas, allocation methods, service charges, and other mechanisms by which central IT receives funding to support its capital and operating expenses.

Global Positioning System (GPS)

A satellite-based navigation system consisting of 24 satellites in precise orbits that transmit signal information detectable by receivers, which use triangulation to determine latitude, longitude, and (in some cases) altitude of the receiver. GPS receivers are increasingly available in cars, smartphones, cameras, and other devices.

Grants Management (Information System) Post-Award

Software to support administration of research projects from notice of award through final billing.

Grants Management (Information System) Pre-Award

Software to support development and submission of grant proposals to external funding agencies.

Green House Gas (GHG) Baseline Survey

A systematic study of the emissions of gases that absorb and emit radiation within the thermal infrared range — primarily water vapor, carbon dioxide, methane, nitrous oxide, and ozone. A baseline survey establishes initial conditions against which an emissions reduction program can be evaluated.

Help Desk
Please include the following in this area if applicable:

- Walk-in support for students, faculty, and staff
- Call-in support for students, faculty, and staff
- Call centers
- Support for knowledge bases, self-help tools
- Specialized support centers
- Help desk staff

**Human Resources (HR Information System)**

Software to support human resources management, including recruiting, training, payroll, benefits administration, etc.

**Hybrid Course**

Refers to a course in which part of the course is delivered online and part is delivered in face-to-face class meetings. Hybrid courses typically reduce the number of days of face-to-face class meetings (for example, from three to two meetings).

**InCommon**

A formal federation of organizations focused on creating a common framework for collaborative trust in support of research and education. InCommon eliminates the need for researchers, students, and educators to maintain multiple, password-protected accounts. Instead the federation supports user access to protected resources by enabling organizations to make access decisions to resources based on a user's status and privileges as presented by the user's home organization. (From [http://www.incommonfederation.org/](http://www.incommonfederation.org/))

**Information Literacy Requirement**

Refers to a requirement to prove the student knows how to find relevant information resources online but also can evaluate the quality of the resource, use technology appropriately for search, categorization, retrieval, and analysis, and understand the ethics associated with the use of intellectual property.

**Information Systems/ERP (Aggregation)**

For the convenience of smaller institutions, the CDS provides the option of aggregating staff and student personnel FTE counts for all five information systems/ERP functions: finance; HR; student; alumni/advancement/fundraising; and other. Larger institutions are strongly encouraged to break out staff and student counts at the more granular level.
Information Technology (IT) Policy

Please include the following in this area if applicable:

- IT policy development, dissemination, and education
- Information usage/management policy development and education
- Interpretation of current policy related to specific issues, situations, and incidents
- Coordinating response to incidents of inappropriate use of information or information technology
- Policy staff

Information Technology (IT) Security

Please include the following in this area if applicable:

- Vulnerability analysis
- Security planning and design and implementation
- Security policy and process development
- User education and guidance programs
- Incident response
- Security administration staff

InfraGard

A partnership among the U.S. Federal Bureau of Investigation (FBI), businesses, academic institutions, and state and local law enforcement to share information and intelligence to protect cyberinfrastructure and guard against cyber threats to critical infrastructure. (From http://www.infragard.net.)

Institution

For CDS participants from Central Offices of Multi-Campus Systems and Community College Districts, Institution refers to the Central Office only, not the entire multi-campus entity. For all other participants, Institution refers to the individual college or university (which the legacy CDS survey referred to as a Campus). See Multi-Campus System.

Institutional Research (IR)

The function in college and university administration to inform planning and decision making by collecting, analyzing, reporting, and warehousing a wide range of data about students, faculty, staff, finances, etc. While such functions may be carried out by many individuals, most institutions have a central Office of Institutional Research, or the equivalent, responsible for the institution's primary IR activities, including reporting of institutional information to accrediting agencies, government offices, and other external entities.
Institutional Review Board (IRB)

An institutional committee formally designated to approve or disapprove, monitor, and review biomedical and behavioral research involving human subjects. In the United States, IRBs operate under guidelines established by the Food and Drug Administration and the Department of Health and Human Services. Protocols for securing data about human subjects are among the issues addressed by an IRB.

Instructional Technology, Multimedia Services, Student Computing

Please include the following in this area if applicable:

- Classroom technology (physical renovation and maintenance; provision of fixed and mobile technology)
- Learning (course) management systems (homegrown or purchased)
- Specialized training and support for faculty
- Specialized training and support for students
- Instructional support staff (including technologists and designers)
- TV, broadcasting
- Public student lab support
- Teaching and technology center staff

Interactive Learning

Refers to learning environments that involve interaction between the student and (a) faculty, (b) other students, or (c) resources. Interactive learning can involve Q&A, simulations, games, role playing, experimentation, and so forth.

Internet Protocol Television (IPTV)

A system wherein a digital television service is delivered to subscribing consumers using the Internet Protocol over a broadband connection.

IPEDS

The Integrated Postsecondary Education Data Systems (IPEDS) is a single, comprehensive, data collection program designed to capture data for the National Center for Education Statistics (NCES) for all U.S. institutions and educational organizations whose primary purpose is to provide postsecondary education. IPEDS collects institution-level data in such areas as enrollments, program completions, faculty staff, and finances. IPEDS data reporting requires the extensive effort of a variety of offices on any campus, and this is the "official" information the college or university stands behind, used by the federal government. EDUCAUSE collects a subset of IPEDS data from CDS participants from outside the U.S. in order to facilitate international benchmarking.

Kiosk
A general-purpose or specialized computer or terminal installed in a public area to enable students, other community members, or the general public to access information, transact business, or perform other functions. A kiosk is intended for comparatively short sessions and is often designed for standing access, as compared to the computer workstations found in a typical computer lab, which provide for extended use.

Last (Prior) Fiscal Year

Although most questions in the CDS survey modules request data for the current fiscal year, several questions specifically request data for the last (or prior) fiscal year. In the United States, most higher education fiscal years begin in July, August, or September; accounting practices vary internationally.

Learning (Course) Management System (LMS or CMS)

Software that provides an integrated suite of online resources and communications capabilities in support of traditional courses and can also serve as a platform for fully online courses. A typical LMS provides a range of activity modules, such as forums, databases, and wikis; facilitates student assignments and quizzes; and enables monitoring of student engagement and reporting of grades. Many LMS implementations are integrated with student information systems.

Learning Objects

Refers to reusable digital learning material, such as a simulation, data set, or glossary. Learning objects include metadata, which allows them to be categorized and searched.

Library/IT Staff

If your Central IT organization has merged with the Library, please divide the library FTE into two categories when answering Module 1, Question 7:

- Those performing IT-related functions should be included in Functions 1 through 9 as appropriate.
- Those performing “traditional library functions” should be included in Function 10 - Other, and describe them as library staff.

If your IT organization has not merged with the library but you have staff supporting library systems, please include these staff in the appropriate FTE accounts, such as 2e - Information Systems/ERP - Other and 6 - Data Center, Operations.

Mailroom

A central facility to receive, sort, and distribute inbound postal mail and to process
outbound postal mail.

Mainframe

A computer typically optimized for high reliability and security, high-volume and concurrent input/output processing, and substantial storage. Examples include IBM Z-Series, Unisys ClearPath, and Fujitsu BS2000.

Multi-Campus System

A multi-campus system is defined as a group of two or more colleges or universities, each having substantial autonomy and headed by a chief executive or operating officer, all under a single governing board, which is served by a system chief executive officer who is not also the chief executive officer of any of the system's institutions. Such a system is to be distinguished from a "flagship" campus with branch campuses, and also from a group of campuses or systems, each with its own governing board, that is coordinated by some state body. (National Association of System Heads, http://www.nashonline.org)

Multimedia Services

Support for design, production, and deployment of content in audio, still image, animation, video, and interactive formats, often in combination with text.

Net Revenue

Refers to revenue remaining after accounting for expenditures for products and the cost of doing business.

Network Infrastructure and Services

Please include the following in this area if applicable:

- Wire and cable infrastructure for data and video networks
- Campus data network
- Remote access (modem pools, ISP)
- Commodity Internet
- High-performance research network (e.g., Internet2, National LambdaRail)
- Video network
- Converged network
- Wireless network
- Staff, hardware, and software for network infrastructure

Network Operations Center

A facility for monitoring and managing a data, video, or voice network. The facility may also include some of the operating equipment.
Office of the CIO (Aggregation)

For the convenience of smaller institutions, the CDS provides the option of aggregating staff and student personnel FTE counts into a somewhat arbitrarily named Office of the CIO, which comprises the first four functional groups of the central IT organization: administration/planning and budgeting/R&D; IT policy; IT security; and project management/business process analysis/systems analysis. Larger institutions, however, are strongly encouraged to break out staff and student counts at the more granular level.

Open Content

Content licensed in a manner that provides users with the right to make more kinds of uses than those normally permitted under the law, at no cost to the user. (From http://www.opencontent.org/) Of primary concern are four rights:

- Reuse: the content in its unaltered/verbatim form
- Revise: adapt, adjust, modify, or alter the content itself
- Remix: combine the original or revised content with other content to create something new
- Redistribute: share copies of the original, revisions, or remixes

Operating Appropriation

Refers to the allocation to the central IT organization from the institutional operating budget that is generally used to cover all non-capital IT operations costs such as staff compensation and benefits, operating expenses, equipment (including maintenance and repair), software licenses, and so forth.

Outsource or ASP

Outsource in this context refers to contracting with an external entity or vendor to provide IT services or infrastructure that you might otherwise have employed your IT staff to perform. It does not refer to an arrangement with another part of your institution or with a system office. ASP refers to an arrangement with an application service provider to provide services remotely using high-speed private networks. A common example is a website that other websites use for accepting payment by credit card as part of their online ordering systems.

Payment Card Industry (PCI)

In general, PCI refers to debit, credit, prepaid, ATM, and other cards and associated businesses. PCI also refers to the Payment Card Industry Security Standards Council, which oversees the Payment Card Industry Data Security Standard.

Portal
Refers to an approach to an institution's website that aims to leverage investments in enterprise information systems, data warehouses, and infrastructure by providing a seamless and easy-to-navigate web interface to an integrated set of information services for various institutional constituents.

President

Title for the chief executive officer (CEO) in most U.S. colleges and universities. In some multi-campus systems and community college districts in the U.S., president is the title of the chief executive officer of the system or district (in which case the campus CEOs carry the title of chancellor). In other cases, the chancellor is the system CEO, with the campus CEOs designated as presidents.

Print/Copier Services

A centralized facility and associated services to produce high-volume printed and photocopied materials.

Project Management/Business Process/Systems Analysis

A set of services often found in central IT organizations that supports design, development, and management of programs, projects, and services.

Provost/Chief Academic Officer

In many institutions in the United States, Australia, and Canada, a provost is the senior academic administrator, responsible for curricular and instructional programs and, in some cases, admissions, libraries, museums, student services, and IT. Deans of the various colleges, faculties, and schools typically report to the provost. This position is designated as pro vice chancellor in some institutions in the United States and Ireland.

Public Key Encryption (PKI)

A system of public encryption using digital certificates from certificate authorities and other registration authorities that verify and authenticate the validity of each party involved in an electronic transaction.

Rent

Any space charges assessed to central IT by the institution or other facility owner.

Research and Education (R&E) Networks

Specialized and restricted-access networks dedicated to support universities, colleges, and other education and research institutions and their affiliates, as distinct from the
commodity Internet. R&E networks are operated at the national, regional, and state levels, with numerous interconnections around the world. Institutions served by one or more R&E networks typically have a direct connection to the commodity Internet as well.

Research and Education Networking - information Sharing and Analysis Center (REN-ISAC)

A membership organization headquartered at Indiana University that provides security information collection, analysis, dissemination, and early warning to support the unique environment and needs of organizations connected to served higher education and research networks. (From http://www.ren-isac.net/.)

Research Expenditures

Expenditures for research funded by external grants and contracts from government, corporate, foundation, and other sources. Expenditures for a fiscal year are distinct from the total of research awards for the same period.

Research Technology Services

Please include the following in this area if applicable:

- Research computing, storage, and visualization hardware and software
- Research technology services from remote sites
- Staff for research computing operations, consulting, and technical assistance
- Academic hardware and software that does not relate to instruction
- Discipline-specific applications development, programming, and support not related to instruction
- General statistical support

Satellite Academic Campus

A campus that does not have its own executive officer, as distinct from a component campus of a multi-campus system or community college district.

Server Hosting

Provision of facilities in a data center for another department, or external entity, to locate and manage their servers

Server Management

Provision of hardware and operation systems management as well as data center facilities for servers owned by another department or external entity

Shaping
Shaping bandwidth utilization refers to adjusting parameters on the institutional Internet connection to limit use through various means, such as type of connection, location of connection, direction of traffic, time of day, or other specific characteristics.

**Smart Cards**

Refers to a small electronic device about the size of a credit card that contains electronic memory, and possibly an embedded integrated circuit. Smart cards are used for a variety of purposes, including storing information, storing digital cash, and providing a means to access computer networks.

**Staff**

Refers to all staff employed by the central IT organization, including clerical, technical, and management staff and limited-term or temporary employees. If your institution contracted with a vendor or external organization to provide all or nearly all IT services during that period, including all IT staff on site, please count the employees of the outsourcer as staff rather than contractors. If your IT organization has merged with the library, please include in your staff count only the library FTE personnel who perform IT-related functions (see Library/IT Staff).

**Student (Information System)**

Software to manage information about students, including the admissions process, course registration and grades, degree audit, housing, etc., and to provide student self-service functions such as course registration, access to course catalogues, class schedules, grades, transcripts, and so forth.

**Student Technology**

Facilities, equipment, services, and staff in support of student access to and use of the institution’s and other information, learning, and communications resources; includes public student lab support and specialized training and support for students.

**Sub-metering**

Deployment of energy meters in individual buildings, or floors or sections of buildings, to enable measurement of, and billing for, energy use.

**Support Services (Aggregation)**

For the convenience of smaller institutions, the CDS provides the option of aggregating staff and student personnel FTE counts for the two support services functions: help desk and desktop computing/user support/training/computer store. Larger institutions are strongly encouraged to break out staff and student counts at the more granular level.
Sustainability

Achieving the institution’s mission while decreasing its use of materials and reducing negative impacts on the environment.

System

See Multi-Campus System

Tablet

A portable personal computer equipped with a touchscreen as a primary input interface.

Telephony

Please include the following in this area if applicable:

- Wire and cable infrastructure for voice network
- Dial tone (including services to student housing)
- Voice mail
- Long distance resale
- Cellular and paging services
- Telephony staff, hardware, software, etc.

Television-Quality Video Studio

Video facilities, equipment, transmission capabilities, and expert personnel enabling the institution to produce or participate in remote production of live and recorded video programming suitable for television broadcast.

Time Division Multiplexing (TDM)

Transmission of multiple signals, such as telephone calls, over the same medium by taking turns on the channel. TDM is used for circuit mode communication, as contrasted to “VoIP.”

Token

Refers to a small physical device used to authenticate the holder to a computer system or network. Tokens can hold cryptographic keys or provide one-time passwords. Tokens typically require a user-entered PIN and therefore can directly implement two-factor authentication.

Two-Factor Authentication

Refers to any authentication protocol that requires two forms of authentication to
access a system. This contrasts with traditional password authentication, which requires only one factor (knowledge of a password) to gain access to a system. Three standard kinds of authentication factors are recognized: something you know (such as a password or PIN), something you have (such as a credit card or a hardware token), or something you are (such as a fingerprint, a retinal pattern, or other biometrics).

**Visualization**

Use of computer graphics, often with large or multiple displays driven by high-performance computers accessing large databases to produce still and dynamic images that enable exploration, analysis, and understanding of research data; presentation and manipulation of instructional simulations; design of architectural and product models; and other applications.

**Voice over Internet Protocol (VoIP)**

A set of technologies and commercial products and services that enable transmission of voice and multimedia sessions over Internet Protocol (IP) networks. VoIP usually refers to replacement of traditional telephone sets and their associated cabling and user charges with either a dedicated VoIP phone set or an appropriately configured computer. VoIP can also be deployed within the telephone switching infrastructure, even if users retain their traditional sets.

**Web Services**

Refers to a standardized way of integrating web-based applications using the XML, SOAP, WSDL, and UDDI open standards over an Internet Protocol backbone. XML is used to tag the data, SOAP is used to transfer the data, WSDL is used for describing the services available, and UDDI is used for listing what services are available. Used primarily as a means for businesses to communicate with each other and with clients, web services allow organizations to communicate data without intimate knowledge of each other's IT systems behind the firewall. Web services are sometimes referred to as application services.

**Web Support Services**

Please include the following in this area if applicable:

- Content management support
- Web server support
- Content design and web-based publication
- Web-based applications development or interface
- Web support staff, hardware, and software

**Wiki**
Refers to an editable web page that can be edited by anyone with access to the wiki.

**Wireless Security Technologies**

Refers to technologies used to prevent unauthorized access, ensure the confidentiality of data, and detect misuse of wireless networks.

**Work Study**

The U.S. Department of Education, through the Federal Work Study Program, provides funds earned through part-time employment to assist students in financing the costs of postsecondary education (from [http://www2.ed.gov/programs/fws/](http://www2.ed.gov/programs/fws/)). College and university departments that employ Work Study students have correspondingly lower wage costs. Institutions outside the U.S. may benefit from similar programs.