

Active & Interactive

NEWS

What Is “Cloud” Computing?

Do you have a “cloud” hanging over you? You do! “Cloud” computing, now a buzzword, exists all around us on campus or in your favorite coffee shop-- but what actually is it and how does it impact you? In a simple sense, Cloud computing accesses software or applications from your own computer or laptop (or another device like a smartphone) without having to actually download the software or files onto your computer. Cool, because this enables people like us to access software and files without having to worry about purchasing specific support software, use specialized computer hardware, or be limited by the abilities of the system they possess. Another way of thinking of this, the Cloud is an off-site location(s) very much like “outsourcing” the computing operations and

infrastructure, enabling your computer to simply act as a data entry and output display device (sound familiar main frame alum). The most common examples of cloud computing used by Kent State would be Gmail, Google Docs, Blackboard Learn and KSU’s Drop-box. With each of these services, there is no requirement for loading software onto your computer; you merely need Internet access and/or authorization to use the service.

Types of Cloud Computing

There are essentially two levels of service on and around campus when it comes to cloud computing: **Platform-as-a-Service (PaaS)** and **Software-as-a-Service (SaaS)**. Being aware of the levels of service can help you make decisions about how to identify and employ a specific service to further your research and instructional needs.

With **PaaS**, an operating platform is provided in addition to the hardware, enabling a user to build/design/run their own applications or license software independently for use on the platform. The platform's underlying software and hardware maintenance, to include upgrades and software patches, is handled by the service provider. If you were interested in assembling your own software suite for use in a given environment, this would be the service you would employ.

The highest level of service, and the most common in the academic community, is **SaaS**, in which the software, licenses, security, servers and most necessary software, excepting only the user's computer and Internet connection, are provided as part of the service. The most relevant example on campus would be Kent's Gmail or Blackboard Learn.

Advantages of Cloud Computing in Education

A number of advantages are inherent to cloud computing for faculty and students, including reduced costs, less software downtime, expanded system capabilities and greater ease of implementation in teaching and research arenas. Cost reduction occurs when a single license is purchased to cover a large number of users, with the software and most of the operating hardware

located off-site and maintained by the software provider instead of a department or lab. This means that once a user account has been created, they will be able to access and operate the software from a number of platforms; oftentimes this means, as with Kent State's adoption of Blackboard Learn, students and faculty can utilize the software on laptops, tablets, smart phones, and other emerging mobile devices.

Cloud computing is a boon for distance education, allowing students to interface with courses from locales limited only by the availability of wireless, cellular or satellite signal accessibility. Additionally, the confusion that has historically resulted from students needing to purchase and load software in differing versions for numerous operating environments is eliminated by cloud computing. While there are occasionally extensions and plug-ins that may need to be installed/ updated on web browsers, and sometimes limitations on which browsers can be used with specific software, a number of historically pervasive compatibility problems have been eliminated.

Applications in the Cloud

An array of applications exist, many of which are free, for use in education, business and personal environments. These applications include most social media tools, information storage and backup methods, file sharing services, collaboration tools, research applications and a multitude of continuously emerging services. In fact, several application suites have emerged, allowing users to capitalize on powerful software without having to worry about system specifications.

The Future of Cloud Computing in Education

Several noteworthy examples are listed here:

☁️ **Dropbox.com:** A free service that provides virtual portability and storage for pictures, videos, documents and other types of files, Dropbox.com also allows you to share these files with others, bypassing the need for physical storage devices such as flash drives.

☁️ **Joukuu.com:** Joukuu brings a simple means for managing, sharing, and collaborating with cloud based backup files across multiple accounts. With Joukuu, you can access all of your backup files and folders together at one place; you can search files across multiple accounts; you can share files or folders with your students and colleagues.

☁️ **Evernote.com:** A research tool capable of collecting, organizing and saving information from the web in a single location, Evernote allows users to digitally clip and store images, snap photos, make notes, and record audio. It allows you to coordinate information across devices and even share or collaborate with others. This application is also free of charge.

☁️ **Zoho.com:** Zoho provides a comprehensive suite of applications that allow for productivity, collaboration, information management, and more than twenty other cloud-based tools. From project management to web conferencing to online presentations, Zoho provides integrated tools designed for group interactivity and portability.

☁️ **Zotero.org:** A free, straightforward tool for handling research operations, such as citation, organization and note-taking. It can be integrated directly into the browser you prefer to use when navigating the Internet, simplifying and centralizing research activities.

Although the increasing presence and scale of cloud-based applications has grown considerably over the last few years, there's not a great deal of research on the relationship between the current, widely-available applications and varying pedagogies (Stevenson & Hedberg, 2011). It is clear that many of the Web 2.0 tools (i.e. collaborative and interactive applications) made available through cloud-computing services present opportunities to grow from traditional teaching methods. Pursuing how these tools can be employed is still a work in progress, but there is little doubt, especially when the familiarity students have with the "digital world" is cemented in their social lives from childhood, that constructivist use of cloud-based applications in education enables learning far more rigorously than traditional "information delivery" methods (Stevenson Hedberg, 2011). If you'd like to examine cloud computing as a concept or particulars please make some time to visit the **FPDC** by scheduling an appointment at **330-672-2992**.

(Stevenson, M., & Hedberg, J. G. (2011). Head in the clouds: a review of current and future potential for cloud-enabled pedagogies. Educational Media International, 48(4), 321-333. doi:10.1080/09523987.2011.632279)

Don't forget about our workshops and upcoming events located on the next page. Take a look and register today!



Workshops, Announcements, and Events

Showcase of Excellence in Experiential Learning – Call for Nominations

The Office of Experiential Education and Civic Engagement (OEECE) Showcase of Excellence in Action: A Celebration of Engagement & Service will recognize and celebrate faculty, students, and staff who committed their time and talents to address community needs through course-based experiential learning and service activities. The event will take place April 10, 2013 in the Moulton Hall Ballroom from 4:00 pm-6:00 pm.

Library Database Workshop

The strength of any research university lies in its ability to provide cutting edge information to students and faculty. This workshop will discuss the breadth of available information sources and examine some of the more powerful resources available through the library. Opportunities for exploration and discussion will be integral parts of the workshop.

When/Where: Tuesday, March 19, Moulton Hall, room 038

Time/Register: 9:00 am – 10:30 pm, [Register Here](#)

The Engaged Campus: Strategies to Connect Student and Academic Affairs

What is the relationship between student and academic affairs on your campus? Speakers with diverse perspectives will discuss strategies to foster a lasting partnership between student and academic affairs, and share their experience with successful models. Participants will discuss applicable methods and tested outcomes of using civic engagement to bridge the student and academic affairs divide on their campus. KSU students, faculty and staff can attend at NO COST.

When/Where: Thursday, March 21, Moulton Hall Ballroom

Time/Register: 1:30 pm-5pm, [Register Here](#)

Evidence-Based PowerPoint to Deepen Learning

Death by PowerPoint—can we let any important, beautiful, or intriguing idea go down this path? Join in an interactive workshop to connect the basics of visual design to your personal style that leads to deeper learning. We'll focus on design elements and their relationship to deep learning, and provide resources for your exploration.

When/Where: Thursday, April 11, MAC Annex Lecture Hall, Room 292

Time/Register: 12:30 pm-2:30 pm, [Register Here](#)

