

# IT Services Strategic Plan

Stanford's mission is "seeking solutions to global problems and equipping our students with the education they need to become leaders in a complex and interrelated world."



IT Services supports Stanford's mission by delivering information technology to support research, learning, teaching, and advanced patient care.

IT Services seeks to be a trusted advisor to the Stanford community, providing strategies and services that meet real business needs.

## FUTURE STATE

Access to your stuff from anywhere, backed by the technology and support you need.

*We partner across Stanford to ensure that you, as a member of the Stanford community, always have the technology and capacity you need to get your work done, independent of location or platform. Our goal is to provide solutions that enable flexibility, with IT support that is available 24x7x365.*

## RATIONALE

IT Services must engage with the Stanford community to anticipate and support the IT needs of a multi-campus, world-class research university and medical institution.

*Our support models need to be proactive and continuously available around the clock because Stanford is mobile and global. As a member of the Stanford community, you expect untethered, on-demand, and seamless access to the applications, services, and support you need to get your work done.*

*Our goal is to ensure that the services we provide can meet campus needs for research computing, emerging pedagogy, advancements in patient care, and inter-department, inter-school, and inter-institutional collaboration. We must provide rapid, secure, and efficient delivery of the best innovations available in the market, and support those innovations through a variety of methods and channels.*

## CLIENT EXPERIENCES

*What you will be able to expect from IT Services:*

Professor Smith invites her students to watch her lectures live or “chunked” on the web. She conducts the course remotely, with students participating in China and Germany, as well as on the Stanford campus. Her students access course materials from their phones and tablet computers, at any time of day.

Researchers at different institutions use the latest collaboration tools to further their scientific research. They are able to run and analyze simulations remotely, with all collaborators able to access results through shared resources, regardless of geographical location.

Faculty, TAs, students, medical and admin support staff are able to access IT help 24 hours a day, with chat functionality. There are even social media-enabled help forums for the Stanford community.

Although a regional disaster disrupts business as usual in most of Northern California, the Stanford community’s access to core applications and services remains available. At Stanford Medicine, doctors and nurses are able to continue surgeries and patient care without interruption.

- Access anywhere from any device at any time, with a tailored experience based on your Stanford identity
- Access 24x7x365 to services, solutions, and support
- Secure access to the applications and data you need from your Stanford-managed device
- Secure, integrated access to the best technology, in the cloud and/or at Stanford
- Consistent data protection and security, in the cloud and/or at Stanford
- Rapid delivery of solutions that meet the broadest campus need while providing the best value
- All applications and services work on your mobile devices
- Integrated support for the communication and collaboration needs of Stanford’s academic and medical communities
- Seamless transition between local computing resources and elastic cloud-based resources
- Shareable computing resources to meet growing research computing demand, across campus and the global research community
- Additional channels for end-user support available whenever you need that support
- Expanded business continuity and disaster recovery

## CURRENT ROADMAP

*Our near-term strategic imperatives:*

“In spite of these hazards, I think online education and the role of technology in education are going to be transformative.

And I'd like to think that what we've started here will not only continue at Stanford but that other universities will see it as a way to organize education and to play a larger role in the world.

“To do this, however, universities have to be willing to change. Universities build on tradition and history, but they also have to be dynamic. And I think that struggle to balance those two opposing forces – to not become too attached to the past in such a way that you can't do something new, or to become too faddish in such a way that you lose your core values – is an ongoing challenge for all institutions.

“But online education is going to happen; it's not going to wipe everything else out, but it is going to happen.  
We have to embrace it.”

*President John L. Hennessy  
May 2012*

<http://alternative-educate.blogspot.com/2012/05/stanford-universitys-president-predicts.html>

### Access

- Continue improving the Stanford University wireless network by increasing capacity, performance, security, coverage, and ease of use
- Provide pervasive, seamless use of unified communications tools: integrated voicemail, email, text messaging, fax, chat, phones, and video conferencing
- Improve indoor cellular coverage
- Extend a consistent Stanford identity and authorization experience to the network and to the cloud

### Mobility

- Make mobile devices “first class citizens” in Stanford's computing infrastructure, ensuring that they are secure, with the right software and the right applications
- Add functionality and security to all Stanford-managed devices

### Infrastructure

- Continue migration to cloud-based collaboration tools, integrating new tools for use by the Stanford community
- Continue to consolidate and virtualize computing equipment to realize energy savings and reduce operating expenses
- Implement cloud-based computing and storage cycles
- Combine data center and cloud solutions for business continuity to ensure that critical business and communication activities can continue in the face of the significant on-campus disruption

### Support

- Increase help options by expanding self-help tools, participating in community-driven special interest groups, and providing interactive, online support options
- Initiate a computational research program for Stanford
- Facilitate solutions that support changing pedagogical models, such as IP video conferencing for Stanford High School
- Simplify the experience of ordering, provisioning, and procuring services

## FUTURE ROADMAP

*Our longer-term strategic directions:*

**“There is a pervasive feeling that the future has already arrived.**

In fact, there are three futures that we have to contend with: the ‘contemporary future’, the ‘visible and the predictable future’ and the ‘distant and unpredictable future.’”

*From “The Higher Education Summit: Roadmap for the Future”  
President John L. Hennessy et al.*

### Access and Mobility

- Offer multiple tiers of authenticated access based on your Stanford identity and managed device
- Broaden mobile device coverage and increase integration of Stanford/vendor cellular networks

### Infrastructure

- Ensure that cloud services provide an experience that is tailored to you while protecting your privacy and personal data
- Ensure that all University computing needs can be met through off-campus solutions, minimizing or eliminating any IT disruption in the event of an on campus disaster
- Provide an ability to replicate and share research data
- Establish elastic and geo-diverse storage and computing models
- Deliver highly energy-efficient physical, virtual and cloud-based alternatives for campus clients in order to reduce or eliminate their need for local server rooms
- Provide a specialized research computing datacenter facility that supports extremely high-density computing and data storage capacity, and directly supports investigators’ future modeling and data analysis requirements
- Continue to integrate medical support systems and unified communications systems to improve the efficiency and collaboration of Stanford Medicine physicians, faculty, nurses, and staff

### Support

- Provide 24x7x365 continuous support by consolidating all IT Support Desks
- Merge collaboration technology, interface design, support channels, and knowledge bases within IT interactions to create user experiences that enable the academic mission of the University
- Identify and provide the appropriate suite of services to support emerging on-line pedagogical models, as recommended by the Presidential Advisory Committee on Technology in Higher Education