

CASE STUDY UNIVERSITAS TERBUKA

» FUJITSU ENABLES US TO MAXIMIZE THE BENEFITS OF CISCO NETWORK TECHNOLOGY TO ENHANCE OUR UNIVERSITY'S DISTANCE LEARNING EXPERIENCE«

Nang Budiyanto, Person in Charge of the Development and Application Program at UT's Courses, Exams and Information Systems Institution.



The customer

Inaugurated in 1984, Universitas Terbuka (UT) is the 45th state university in Indonesia. It has distinguished itself by employing an open and distance learning (ODL) system. Being an Open University means UT is open to any senior high school graduate regardless of their age, while there is no limitation on the length needed to complete the study. Distance learning refers to minimum physical interactions. Courses, modules and tutorials are delivered through various media, from print, TV and radio broadcast, to online. The UT Online service provides students with online tutorials of courses, conducted by an online tutor who will go through various learning materials before giving out online assignments. UT Online is also accessible via mobile devices. This system has proven to be effective in increasing education levels across Indonesia. It has provided access to quality higher education to all citizens, including those who live in remote islands as well as in various parts of the world. Today, UT has 37 campuses (Learning Program Units) in the country with more than 500,000 active students.

The challenge

UT relies on the Internet for conducting courses and providing learning materials to its students. The advancements of information technology provide new opportunities for UT to improve the experience of distance learning. However, the university's legacy network infrastructure was not designed to host such new technologies. UT was running five different switches which caused inefficiencies and incompatibilities in its network operations making maintenance changes virtually impossible. UT decided radically address the situation by revamping its network infrastructure, starting with its main campus in Jakarta. With the help of a consultant, UT redesigned the entire network infrastructure architecture, and with the blueprint in place, started looking for an advanced network infrastructure solution that would bring operational efficiency and serve as a strong foundation for UT's distance learning programme. With the dynamic environment arising from its diverse and fluid student base, it was important that UT's solution be able to cope with frequent changes even during implementation.

The solution

UT opted for Cisco Nexus 7000 for distribution and access switch, but needed an experienced partner to help them implement the network architecture and bring out the many benefits of the Cisco Nexus 7000. UT selected Fujitsu Indonesia, a certified Cisco partner with vast experience and a strong customer track record, to provide it with consultation, assessment and implementation services of the Cisco-based network infrastructure.

The customer

Country: Indonesia
Industry: Education
Founded: 1984
Employees: 1,800
Website: www.ut.ac.id



The challenge

The advancements of information technology provide new opportunities for UT to improve the experience of distance learning. However, the legacy network infrastructure was not designed to host such new technologies. UT needed an advanced network infrastructure solution that would bring operational efficiency and serve as a strong foundation for UT's distance learning. The challenge in implementation was coping with the frequent changes due to the dynamic nature of UT's learning environment.

The solution

Fujitsu provided UT with Cisco Nexus 7000 switch, including consultation, assessment and implementation services. Only Cisco Nexus 7000 has the capabilities to support UT's goal in improving distance learning experience using latest online and multimedia technology.

The benefits

- Rapid implementation. Fujitsu was able to complete the project in just six months despite frequent changes in the network architecture.
- Increased capabilities. The new network infrastructure serves as the foundation of new applications such as teleconferencing, highly interactive online courses and online dry labs.
- Improvement in network operations. Fujitsu's quick response to problem inquiries enabled most troubleshooting to be resolved quickly by UT.

Products and services

- Cisco Nexus 7000 core switch.
- Fujitsu implementation services.

The benefit

Despite frequent changes in network configuration, the entire project was completed within six months, from procurement to implementation. "We had to reconfigure the network infrastructure has to be adaptable and easy to manage and we also added more components to the original network equipment," said Nang Budiyanto, Person in Charge of the Development and Application Program at UT's Courses, Exams and Information Systems Institution. "Not only that, we had a building that was still under construction when we rolled out the network resulting in an implemented architecture that was totally different from what we had planned in the assessment phase."

"Yet, we managed to keep the budget under control," Nang added. "Fujitsu demonstrated their commitment to support us by quickly making appropriate adjustments and delivering the required components to finish the project quickly and efficiently."

Fujitsu installed and configured the Cisco Nexus 7000 which connects 24 nodes in UT's main campus. The fact that there were no complaints from the users was a sign that the network was running perfectly.

Nang was also impressed by Fujitsu's post-implementation support. "Fujitsu responded quickly to our inquiries. As a result, we are able to troubleshoot most of the problem ourselves, and that improved the efficiency of our network operations," he said. "More importantly, we now have a powerful network infrastructure that allows us to enhance the distance and open learning system even further by applying latest technology."

Every building in UT's main campus is able to teleconference with all of the university's 37 regional campuses. Nang expects network utilisation to increase as UT develops richer and more interactive course materials including online dry labs, Internet TV, and video conferencing. This will cater to the new generation of students who are more adept at accessing online content.

"Soon after the network foundation has been laid out, we expect to increase the network capacity from the current one gigabit to 10 gigabits," he said.

Nang expressed strong confidence in Fujitsu and expects to engage it in future projects when UT continues to revamp its network infrastructure. "We are looking forward to having Fujitsu at our side. Fujitsu's exceptional technical competency, excellent support and dedication to finish projects enabled us to maximize the benefits of Cisco's network technology."

Conclusion

The distance learning system employed by UT required a robust and scalable network infrastructure because most course materials, tutorials, exams and student administration are delivered online. Not only that, the network infrastructure has to be adaptable and easy to manage. Fujitsu provided UT with world-class consultation, assessment and implementation of network infrastructure built on the foundation of Cisco's Nexus 7000 switch. Most importantly, as a Cisco Gold Certified Partner, Fujitsu managed to complete the project in six months despite the dynamic nature of the project. Fujitsu is helping UT obtain the maximum benefits of Cisco's leading network technology.

"Fujitsu exceeded our expectations because of their commitment to deliver the project in such a dynamic environment."

Fujitsu will continue to support UT in its implementation of future Cisco network infrastructure and technology projects.

About Fujitsu Indonesia

Fujitsu Indonesia was established in 1995 under the name of PT. Fujitsu Systems Indonesia. Headquartered in Jakarta, the company has a number of service centers in Jakarta & Surabaya and more than 20 authorized service providers across Indonesia. Fujitsu Indonesia has a vision to become a leading provider of IT, communications and customer-focused business solutions.

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