



Technische Universität München

## The Cloud Helps the Institute for Nanoelectronics Break New Ground

### Overview

**Country or Region:** Germany

**Industry:** Education

### Customer Profile

The Institute for Nanoelectronics at Technische Universität München (TUM) focuses on basic research on topics related to novel computing devices and innovative laser structures.

### Business Situation

The Institute had been relying on Microsoft Live@edu for some time, which provided it with much more functionality than the service offered by the central computing resource at TUM—but faculty and students needed still more functionality and storage.

### Solution

The Institute adopted Microsoft Office 365 for education, which provided it with more online storage as well as the features and functionality of Microsoft SharePoint Online, which faculty and students both wanted.

### Benefits

- Greater online storage
- Anytime, anywhere collaboration
- No system maintenance overhead
- No capital outlay for adoption

*“The services offered as part of Office 365 for education are reliable, robust, and secure, yet we don’t have to ensure their reliability or security—Microsoft is committed to that.”*

*Dr. Paolo Lugli, Professor of Electrical Engineering and  
Chairman of the Institute for Nanoelectronics, Technische Universität München*

The Institute for Nanoelectronics at the Technische Universität München—the Technical University of Munich—had been relying on Microsoft Live@edu for some time. While pleased with the features and functionality that Live@edu delivered, Institute faculty and students wanted more email storage space than Live@edu offered. Moreover, they wanted to find a way to connect the Live@edu environment with the Microsoft® SharePoint® Server-based collaboration tools they were using on premises. When the Institute personnel heard about Microsoft Office 365 for education, they realized that the solution they were looking for might be right there in the cloud. With Office 365 for education, each account would have a full 25 gigabytes of online email storage, and with access to Microsoft SharePoint Online the Institute could begin collaborating in the cloud—at any time, from anywhere, and from any device.



*“The only change they noticed was that now they’ve now got a 25 gigabyte storage quota, but that’s very noticeable and very valuable.”*

Dr. Peter Vogl, Professor of Physics,  
Technische Universität München;  
CTO, DrVis Software GmbH

## Situation

At the Institute for Nanoelectronics at the Technische Universität München (TUM)—the Technical University of Munich—faculty and students focus on basic research relating to such matters as the design, fabrication, and simulation of novel computing devices and innovative laser structures. It’s very sophisticated, highly technical work, so it comes as no surprise to hear that the Institute long ago stopped using the bare-bones email system that the computer center at TUM offered. For several years, the Institute had been relying on the much more sophisticated Microsoft Live@edu solution to provide its communications infrastructure, and the benefits had been tangible throughout the institute:

- Students and faculty could collaborate much more effectively via email distribution groups and shared calendars.
- Resource booking enabled better use of lab equipment (quarrelling among faculty and students about who had the right to use a lab at a particular time even ceased, to everyone’s surprise and delight).
- Shared calendars for the chair’s lecture rooms made it easy for students and staff to meet and to stay informed about upcoming talks, seminars, and lectures.

But there were two ongoing challenges that the Live@edu solution was not overcoming for members of the Institute. Most of the faculty and some of the students needed more than the 10 gigabytes (GB) of email storage allocated to them under Live@edu (even though that was five times the storage quota the University had previously provided). Moreover, faculty and students at the Institute were heavy users of Microsoft SharePoint Server, which the Institute had deployed to facilitate

collaboration and the distribution of course materials, student and guest presentations, regencies, articles of interest, and more. While Live@edu helped the institute by offloading the burden of maintaining its email infrastructure, it was not offloading the burden of maintaining the SharePoint Server infrastructure. That task still fell to the students at the Institute.

When Institute personnel became aware of Microsoft Office 365 for education, though, they saw distinct benefits. Not only could faculty and staff continue to enjoy all the benefits they had gained by adopting Live@edu, but they could also gain more online storage space and, when it became available in Germany, they could begin to take advantage of SharePoint Online. Using SharePoint Online would immediately shift the task of monitoring and maintaining the Institute’s SharePoint Server-based collaboration environment to Microsoft, which would manage that environment in the cloud.

## Solution

Microsoft Office 365 for education combines the familiar Microsoft Office desktop suite with online versions of next-generation Microsoft communications and collaboration services, including:

- Microsoft Exchange Online for email, shared calendars, and shared address books.
- Microsoft Lync® Online for instant messaging and online video conferencing.
- Microsoft Office Web Apps for online access to Microsoft Office files.
- Microsoft SharePoint Online for collaboration and resource sharing.

These applications run in data centers owned and operated by Microsoft, and Microsoft maintains the servers and the

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Dr. Paolo Lugli, Professor of Electrical Engineering and Chairman of the Institute for Nanoelectronics, Technische Universität München

software on a day-to-day basis. This frees those responsible for system administration and maintenance at the Institute to devote their time and attention to activities that are more critical than managing IT infrastructure—in this case their research. And, because Microsoft keeps the Office 365 solution up-to-date on the back end, users are always working with the latest software releases—without local system managers having to oversee server migrations and upgrades.

#### **Rapid migration**

While the migration of the 70 Live@edu accounts at the Institute for Nanoelectronics was not accomplished in nanoseconds, the migration went quickly nonetheless.

“We decided to make the move on a Monday,” says Dr. Peter Vogl, a Professor of Physics at the Institute and the CTO of IT-consulting firm DrVis Software GmbH which oversaw the migration at the institute. “On Thursday of that week I started moving the accounts from Live@edu to Office 365. It took about four hours, but I did it by myself. I wrote a PowerShell script to collect the properties of all the mail objects to be migrated and another to reset the passwords when the migration was finished, so those steps were automated and it all worked pretty efficiently.”

#### **Benefits**

For the faculty and students at the Institute of Nanoelectronics, the move from Live@edu to Office 365 was transparent on the one hand and immediately apparent on the other. Users still have access to the Exchange-based email services to which they've grown accustomed. They can still use the distribution groups and shared folders in Outlook. They can still book rooms and resources online—so, from that

point of view, nothing is noticeably different. The features that users valued in Live@edu are still present in Office 365.

“The only change they *noticed* was that now they've now got a 25 gigabyte storage quota,” says Dr. Vogl, “but that's very noticeable and very valuable.”

The Institute has not yet begun using the SharePoint Online component of Office 365 for education, but enthusiasm among users is strong. “Users are very much looking forward to the other services that will become available in the forthcoming months,” confirms Dr. Vogl.

“We now have the most advanced email system on the planet and the largest mail storage quota in the industry,” adds Dr. Paolo Lugli, a Professor of Electrical Engineering and Chairman of the Institute. “We will be able to use SharePoint Online and Microsoft Lync to collaborate at any time, from anywhere, and from any device—which is a great benefit to our students, who live by their mobile devices, as well as to our faculty, which travels around the world. The services offered as part of Office 365 for education are reliable, robust, and secure, yet we don't have to ensure their reliability or security—Microsoft is committed to ensuring that. And the support from Microsoft? The support is outstanding.”

“Now, add 'zero cost' to the list,” says Dr. Vogl, “since Office 365 for education is offered for free. How could anyone resist?”

## For More Information

For more information about Microsoft products and services in Germany, call 01805 67 22 55. To access information using the World Wide Web, go to:

[www.microsoft.de/bildung](http://www.microsoft.de/bildung)

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers in the United States and Canada who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to:

[www.microsoft.com](http://www.microsoft.com)

For more information about DrVis Software GmbH products and services, call +49 89 289 11550 or visit the website at: [www.drvis.de](http://www.drvis.de)

For more information about Institute for Nanoelectronics, Technische Universität München, visit the website at:

[www.nano.ei.tum.de](http://www.nano.ei.tum.de)

## Microsoft Office 365 for Education

Microsoft Office 365 for education brings together cloud versions of our most trusted communications and collaboration products—Microsoft SharePoint Online, Exchange Online, and Lync Online—with the latest version of our Office desktop suite and companion web applications for educational institutions.

Office 365 for education helps save time and money, and it frees up valued resources. Simple to use and easy to administer, it is financially backed by a service level agreement guaranteeing 99 percent reliability. Office 365 for education features robust security, IT-level phone support, geo-redundancy, disaster recovery, and the privacy controls and standards that you expect from a world-class service provider.

For more information about Microsoft Office 365 for education, go to:

<http://education.office365.com>

### Software and Services

- Microsoft Office 365 for education