



Services and Support for Students and Research

CHALLENGE

- Heterogeneous IT environment
- Decentralized support concept
- Research IT where ongoing experiments must not be disrupted
- Specialized software for research, teaching, and administration

SOLUTION WITH baramundi

- Introduction of the baramundi Management Suite starting in 2018
- Centralized management of 4,750 devices
- Managed software for Office and specialized software packages
- Switch to co-management for automated initial installation

RESULT

- Unified management under a single interface
- Significant reduction in hardware lifecycle management effort
- Fast, campus-wide problem resolution
- baramundi established as a reliable long-term partner



- Bavarian University of Law, Economics, Social Sciences, Humanities, and Medicine
- 20,000 students
- 3,500 employees across multiple locations
- 13-member IT team
- 4 750 Endpoints

“While administrators can use baramundi to **build even complex systems and workflows**, support staff can use it easily and in the familiar way they’re accustomed to. In baramundi, we’ve found a partner that understands our needs and can provide immediate, targeted support.”



baramundi IT Management at the University of Augsburg



Founded in 1970 to provide integrated arts and sciences instruction grounded in active research, the University of Augsburg has undergone significant development in recent decades. Initially focused on law, economics, social sciences, and the humanities, the university has steadily expanded its programs in the natural and technical sciences. In 2016, the university established its medical program and a Medical Campus at a second location. Today, 20,000 students and 3,500 employees work, study, and teach at the university.

To ensure smooth operations across research, teaching, student life, and administration, a comprehensive IT infrastructure is required to meet complex needs. Tobias Kauth and the Service & Support staff operate a centralized IT help desk and are part of a 13-member Data Center team that provisions, maintains, and develops the university's IT infrastructure.

A challenging university IT environment

"The combination of the academic environment, cutting-edge research and teaching, and a vibrant campus community has kept me at the University of Augsburg for over 15 years, first as a student, then as a lecturer, and now as an IT administrator."

"Our data center team supports a wide range of research, teaching, academic, and administrative activities," explains Kauth. "There are many bright minds and innovative ideas here, which naturally place significant demands on IT resources."

Data center services encompass:

- IT infrastructure and network management
- Storage and server virtualization
- High-performance computing
- Web, database, storage, and directory services
- Support for complex, specialized applications
- IT workstation infrastructure

"The University of Augsburg uses a decentralized IT management approach. Each department has administrators who manage the faculty's IT systems. My Service & Support team manages the largest endpoint group, which includes about 1,000 Windows clients and 250 primarily mobile devices across 10 sites, including two main hubs on the main campus and the medical campus."

Reducing software distribution workloads through standardization

"We use the baramundi Management Suite not only to manage those devices but also to distribute software updates and configurations to 4,250 Windows devices and 500 other device types across the university."

"baramundi's consistent, intuitive operation and automation capabilities enable us to deploy and update software on those systems efficiently. We manage nearly all standard Office applications and package and install updates for specialized software used in teaching, administration, and research. The baramundi system reduces both the number of tools and the amount of work required to manage specialized software."

"The university procures a variety of hardware through framework agreements. We create standardized configurations that typically include Windows notebooks, dockable monitors, and peripherals tailored to specific research or administrative needs. Standardization significantly improves our ability to quickly address and resolve issues across campus and reduces the workload for hardware lifecycle management."

Managing endpoints used in research and teaching

"Endpoints used in research generally pose greater challenges for IT than those in pure office environments. Software usually requires specific configurations. Updates and other changes must be performed only after prior consultation to avoid disrupting sensitive, long-running experiments and measurements."

"Researchers using these specialized systems must also be able to manage settings and make adjustments for experiments. Unlike in homogeneous office environments, research users and IT administrators work closely together."

"In teaching environments with classroom tablets or computer labs, we focus on providing robust devices for multiple users. Updates and configurations must be automated, reliable, and transparent, and must not require user interaction."

baramundi is a fundamental building block for addressing IT challenges

IT administrators across university departments previously used various client management systems, including SCCM, OPSI, and baramundi. In 2018, the data center began using baramundi to manage IT workstations. Following a proof of concept, we decided to implement baramundi across all the facilities we support to standardize client management.



„[...]“ The ability to manage and automate sophisticated processes with a high degree of flexibility won us over. IT administrators can use baramundi to build and manage complex systems and workflows, while support staff can use it to manage routine tasks. In baramundi, we found a partner that understands our needs and can provide immediate, targeted support.”

Teamleiter Service & Support Tobias Kauth, University Augsburg



"We have been using baramundi for most of our important management tasks, including:

- Hardware and software inventory
- Tracking update statuses, CVEs, and other security-related client statuses
- Software installation and configuration
- Assignment of system configurations (such as power-saving policies, BIOS settings, LAPS, and BitLocker)
- Remote maintenance (remote support)"

baramundi-Intune co-management

"We are also using baramundi to implement several major projects, including migrating hybrid AD/Entra ID devices to Entra ID. In addition to changing our Microsoft management infrastructure, we're using baramundi's Intune co-management capabilities to enroll new clients in both management systems simultaneously."

"We are also transitioning network access to certificate-based access via IEEE 802.1x. A cornerstone of the transition is the reliable distribution of certificates to a large number of devices running different operating systems. We're using baramundi as a configuration and control tool with a single interface to simplify distribution, monitor periodic renewals, and revoke access if necessary."



"Devices enrolled with Microsoft Autopilot are included in the baramundi Management Suite through synchronization with Entra ID. The user sees only the initial Windows setup, while the baramundi agent provisions a fully configured work device in the background, regardless of the device's network connection. This enables us to get the best of both worlds without sacrificing the baramundi Management Suite's user-friendly operation."

Teamleiter Service & Support Tobias Kauth, University Augsburg

Conclusion



“The University of Augsburg has a wide range of endpoint hardware and software requirements for workstations used in research, teaching, student life, and administration. Endpoints include

- Linux systems used in research,
- Windows laptops running Office and other applications,
- macOS systems, and
- iOS mobile devices.

baramundi allows us to use a single, centralized system to manage all of those using standardized procedures within a consistent and intuitive admin interface.”



The baramundi Management Suite greatly simplifies our workflows and makes daily IT support easier.

“In my team’s work, I’ve observed that everyone, from support staff to administrators, understands the Management Suite’s logic and wide range of functions and uses them effectively. From my perspective, baramundi is an excellent blend of comprehensive functionality and consistent usability throughout.”