

**Niedersächsisches  
Justizministerium**

**Customer:** Lower Saxony Ministry of Justice

**Website:** [www.mj.niedersachsen.de](http://www.mj.niedersachsen.de)

**Customer Size:** 16,000 employees

**Country or Region:** Germany

**Industry:** Government—Public safety and justice

**Partner:** PHAT CONSULTING GmbH

**Partner Website:**

[www.phatconsulting.de](http://www.phatconsulting.de)

**Customer Profile**

The Lower Saxony Ministry of Justice runs the judicial system in the state of Lower Saxony, Germany. The ministry employs more than 12,000 people and oversees another 4,000 working in penal institutions.

**Software and Services**

- Microsoft Server Product Portfolio
  - Windows Server 2012 Datacenter
- Technologies
  - Hyper-V

**Hardware**

- Fujitsu RX300 S6 servers

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## State Reduces IP Management Work by 25 Percent, Extends Virtualization with Upgrade

“With the time saved by using IPAM, our staff will have more time to deploy new applications that will give our staff better communications capabilities and reduce travel costs.”

Jan-Christian Wiehe, Systems Engineer, Lower Saxony Ministry of Justice

The Lower Saxony Ministry of Justice has 650 servers located across the northwestern German state. The IT infrastructure is operated by the ministry’s central IT organization, which sought more efficient ways to manage these servers; so, it deployed Windows Server 2012 to investigate the IP Address Management feature. The ministry can reduce its IP address management work by 25 percent and free its IT staff to work on higher-value projects. The ministry can also increase server virtualization by 50 percent with Windows Server 2012.

**Business Needs**

Lower Saxony is the second largest state in Germany in terms of geographical area and the eighth largest in population. The Ministry of Justice, as the state’s supreme judicial authority, is responsible for all courts, prosecuting authorities, and penal institutions, and is also involved in planning legislation at both state and national levels.

The ministry’s IT infrastructure includes 650 servers in nearly 180 locations. The ministry is always looking to reduce costs and urged its IT organization to acquire tools that could centralize and simplify

infrastructure management.

The IT staff spent more than an hour a day—nearly 500 hours a year—just managing the state’s 180 Dynamic Host Configuration Protocol (DHCP) servers in field offices. These servers store the IP addresses that are critical to computer use and application access in the ministry. Lacking a central management tool, staff members had to manually log on to each DHCP server every day to ascertain the health of these servers and determine IP address utilization and availability. This was time that the staff could not take on new projects, such as deploying Microsoft

Lync Server 2010 and Microsoft SharePoint Server 2010, which could provide important new capabilities to ministry employees.

Additionally, the ministry's client and server computer counts increased each year, and while the ministry had virtualized all the servers it could by using the Hyper-V technology in the Windows Server 2008 R2 operating system, there were some servers that it could not virtualize due to availability requirements.

## Solution

The Lower Saxony Ministry of Justice asked to participate in the Rapid Deployment Program (RDP) for the Windows Server 2012 operating system to evaluate the IP Address Management (IPAM) feature. IPAM is a framework for discovering, monitoring, auditing, and managing the IP address space and the associated infrastructure servers. "The RDP was a great opportunity for us," says Jan-Christian Wiehe, Systems Engineer in the IT organization of the Lower Saxony Ministry of Justice. "We had the ability to see Windows Server 2012 up close and try out the new features."

PHAT CONSULTING GmbH, a member of the Microsoft Partner Network with Gold competencies in desktop, system management, and virtualization, contributed with its long-term expertise in government IT infrastructures. PHAT CONSULTING worked with the ministry staff to configure a proof of concept and resolve any issues with the Microsoft product team. The ministry set up a test environment that consisted of one Fujitsu RX300 S6 server running Windows Server 2012 Datacenter and IPAM. That server was used to manage four DHCP servers. "We like Fujitsu servers because they provide a great balance between cost and reliability," Wiehe says.

The proof of concept was a great success. "IPAM is an amazing tool," Wiehe says. "With it, we can see all our DHCP servers in one management console and get a big-picture view of our entire IP environment.

We can see all the statistics about the DHCP scopes in one place, including how many free addresses there are, and also get much more health data about those servers." The Ministry of Justice is in production with Windows Server 2012 for some of its DHCP infrastructure and will soon be managing all 180 DHCP servers with IPAM.

While the ministry focused on IPAM during the RDP, it is also interested in several other Windows Server 2012 features, notably Hyper-V, data deduplication, Hyper-V Replica, and support for the Server Message Block 3 (SMB3) protocol. By using the new virtualization and availability improvements in Windows Server 2012, the ministry plans to replace two or three physical servers in every branch site with virtual machines. "By using Hyper-V Replica, we can replicate virtual machines and get better uptime," says Annette Sander, Systems Engineer in the IT organization of the Lower Saxony Ministry of Justice. "We can also put virtual machines in SMB file servers, which was not possible before."

## Benefits

By upgrading to Windows Server 2012, the Lower Saxony Ministry of Justice can increase IT efficiency, create a more satisfying work environment, and increase server virtualization to reduce costs.

### Reduce IP Address Management Work by 25 Percent

By using IPAM, the ministry will reduce its IP address management work by 200 hours annually—a 25 percent reduction. "With the time saved by using IPAM, our staff will have more time to deploy new applications that will give our staff better communications capabilities and reduce travel costs," Wiehe says.

### Create More Rewarding Work Environment

IPAM also helps to relieve the ministry IT staff of mundane, repetitive work. "When

you automate boring work, you get higher-quality work and more motivated employees," Sander says. "Our people can spend their time on interesting new projects. The German economy is quite healthy, and it's hard to find and keep good people."

### Increase Server Virtualization by 50 Percent

With Windows Server 2008 R2 Hyper-V, the ministry was able to virtualize 30 percent of its servers, but with Windows Server 2012, it will be able to virtualize 80 percent of its servers. "We expect to eliminate 360 physical servers from our landscape, which is good for our bottom line and the taxpayer," Sander says.