

# A vote of confidence in private cloud technology: FRITZ & MACZIOL chooses VMware vCloud Director for its own test and development systems

Software, Systeme und Dienstleistungen  
**FRITZ & MACZIOL**  
 group

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– Martin Drissner, Brand Leader, Virtualization Solutions / System Integration, FRITZ & MACZIOL

## KEY HIGHLIGHTS

### Challenges

- Significantly faster deployment of test and development environments
- Standardization and automation of data center services
- Cost transparency, thanks to the flexible use of existing IT resources

### Solution

- Establishment of a private development & test cloud for F&M-developers and system integrators
- Construction of a self-service portals for automated request handling
- Cost transparency, thanks to precise allocation of users and resources

## FRITZ & MACZIOL

### Fast delivery and transparent invoicing of IT resources in the cloud.

Systems and consulting house FRITZ & MACZIOL regards itself as both a specialist and generalist in relation to IT issues and offers a comprehensive portfolio of hardware, software, services and consulting. The members of the FRITZ & MACZIOL Group develop and sell software and system solutions for public clients as well as large and medium-sized businesses. As part of the Group’s successful strategy of offering the greatest possible customer orientation through fast, flexible responses to current trends, the service portfolio was expanded to include cloud and software-as-a-service (SaaS) consulting.

With its range of solutions covering all aspects of cloud computing, FRITZ & MACZIOL helps its customers to transform their data centers from a conventional computing model to a private cloud service provider. The Ulm-based company has decided to set a good example and has set up its own private cloud environment for developing and testing software solutions.

### Initial situation: long waiting periods and inflexible use of resources

In their daily work, the over 350 developers and system integrators at FRITZ & MACZIOL need to be able to set up and use new test environments for their software developments quickly. Until recently, requests for system resources had to be made by telephone or e-mail and were processed manually by the central IT Department. The roughly 30 requests per day not only took a lot of time and manpower to manage, but also led to an excess of available IT resources in the medium term because many environments remained active in the system after the work was complete.

“When it takes a long time to deal with a request for resources, then people are naturally reluctant to give up the received resources again. This meant on the one hand that the developer teams tended to hoard the resources they no longer needed. On the other hand, they also had to wait for a long time in some cases before being issued with additional computing capacities. This not only led to excess costs, but was impossible to bill to the responsible individuals,” remembers Martin Drissner, Brand Leader Virtualization Solutions / System Integration, FRITZ & MACZIOL. “Our central IT Department sees itself as a service provider for its own staff. We must be capable of providing IT services quickly, flexibly and with full control over costs. In the case of our over 350 developers, we were looking for a user-friendly, agile and cost-transparent solution that would enable us to achieve greater flexibility and service quality through the greatest possible standardization and automation.”

VMWARE VIRTUAL INFRASTRUCTURE AT WORK

VMware in use

- VMware vSphere 4.1 as the basic technology for virtualization
- vCloud Director
- vCenter management solutions:
- vCenter Chargeback
- vCenter CapacityIQ
- vShield Product Family

IT infrastructure

Central F&M data center

*“The major advantages of our private cloud environment are greater flexibility, cost control and cost transparency. We have been able to significantly increase productivity in the development departments and system integration, as well as in IT administration in general.”*

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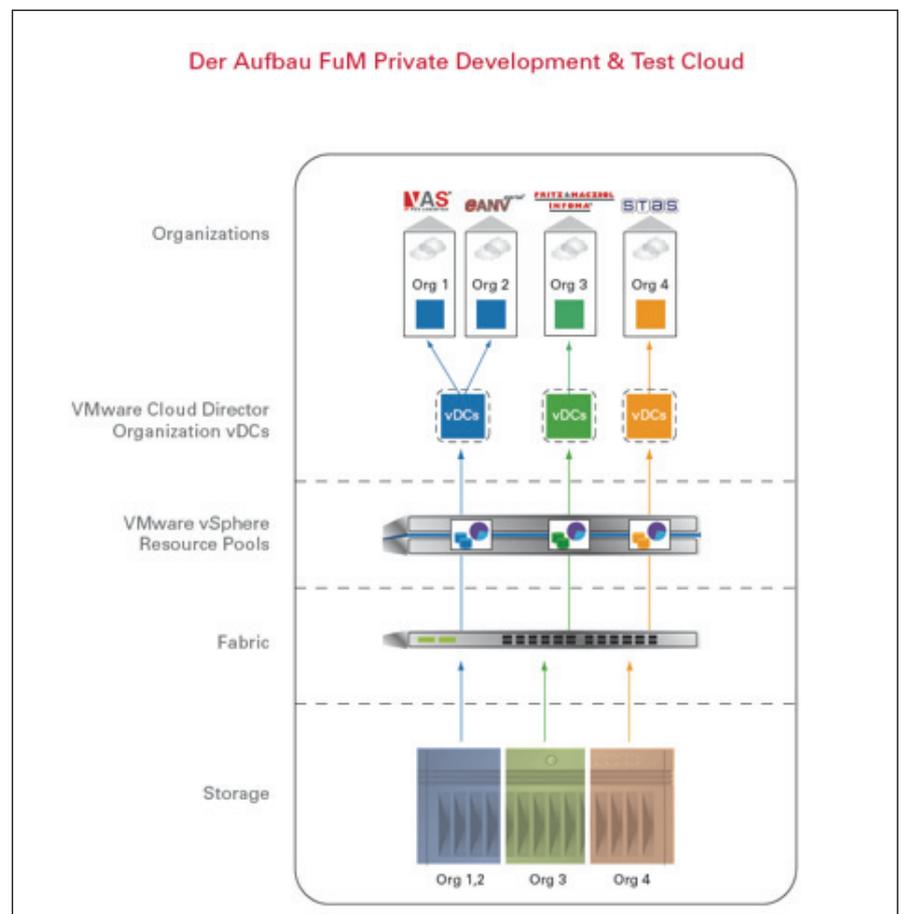
**The solution: private development & test cloud for maximum agility**

FRITZ & MACZIOL were already virtualization pros because the central data center was already largely virtualized with VMware vSphere. Thus, 100% virtualization and the establishment of a private cloud was the obvious next step. “We wanted to make full use of all the advantages of a private cloud environment and the existing VMware vSphere infrastructure, which is why a project implementation with VMware vCloud Director was our first choice. We can now offer the various business organizations isolated virtual data centers very quickly,” explains Martin Drissner.

The first step was to virtualize all the test and development resources at FRITZ & MACZIOL. Next, the standard processes and environments mapped in the private cloud were defined. The F&M developers use a self-service portal to enter their requests. The required capacities are made available automatically and without unnecessary delays. The templates required for this are continuously extended, updated and adapted.

**Full resource control and cost transparency thanks to vCenter CapacityIQ and Chargeback**

In order to prevent possible capacity bottlenecks, FRITZ & MACZIOL uses VMware vCenter CapacityIQ to plan the utilization of IT system capacity in a realistic way. CapacityIQ continuously profiles, analyzes and tracks capacity needs at multiple levels: VM, host, cluster and datacenter. CapacityIQ performs capacity estimates and



**VMware vCloud Director** delivers a new model for providing and consuming infrastructure services. It changes the way that IT delivers infrastructure services and how users access them. The extended ability of vSphere to bundle server resources into logical pools means that IT departments and companies can use VMware vCloud Director to set up virtual data centers – logical pools with CPU, RAM, network and storage resources with defined management policies, SLAs and prices.

forecasts based on historical capacity usage patterns for virtual machines and hosts. As well as producing accurate forecasts, it is also possible to simulate the impact of one-off strategic business changes, known as “what if” analyses.

VMware vCenter Chargeback also enables FRITZ & MACZIOL to implement a billing system that can be used to pinpoint who used what resources when and, most importantly, for how long. This gives divisional managers and central IT an overview of the costs generated by the various departments.

This private development & test cloud enables Central IT in the FRITZ & MACZIOL Group to allocate their existing resources on the basis of needs and to maintain an overview of the use and capacity of the systems at all times. The private cloud also prevents the stockpiling of resources. The allocated systems have a maximum life of 90 days. This ensures that the number of virtual machines does not become unmanageable.

“To put it in a nutshell, the major advantages of our private cloud environment are greater flexibility, cost control and cost transparency. Our developers benefit from the fact that we can provide the resources they need immediately and automatically, a major improvement on our old way of doing things. The old manual approval processes are a thing of the past. This has enabled us to significantly increase productivity in the development departments and system integration, as well as in IT administration in general”, summarizes Martin Drissner.

### Security as a central criterion

Despite the euphoria with this new-found flexibility, the importance of security should not be forgotten: Policy-based user controls and VMware vShield security technologies enable FRITZ & MACZIOL to keep a tight rein on its multi-client cloud environment. The VMware vShield product family, which was specially developed for virtual data centers and cloud environments, optimizes application and data security and ensures that compliance policies are observed.

### Outlook: your cloud – quick-response IT for agile businesses

Based on the experience he has gathered, what advice can Martin Drissner offer to other businesses contemplating setting up a cloud environment?

“The most important thing in the beginning is to get the basic architecture right. This avoids over-provisioning, while still offering users optimum performance. The technical basis for setting up a cloud environment is a high level of virtualization, ideally 100%. This is the only way to ensure that the resources are dynamically assigned to the relevant user groups. However, unlike other IT projects, it should be pointed out that a company needs to make some fundamental choices before setting up a cloud environment. The key question is to what extent a company is prepared to abandon familiar practices and to open itself up to new, modern “IT as a service” approaches,” explains Drissner.

His personal plan for the Ulm-based system and consulting house is to deploy VMware vCloud Request Manager. This can be used to automate complex approval processes in accordance with predefined compliance requirements and role assignments. Requests received via the vCloud Request Manager portal can be processed automatically by means of predefined work processes, such as approval loops, software updates, cloud provisioning and e-mail messages.

**VMware vCenter Chargeback** allows cost models to be customized to the processes and policies of different organizations. Virtual machine resource consumption data is collected by VMware vCenter Server ensuring complete and accurate tabulation of resource costs. Integration in VMware vCloud Director enables automated calculation for private Cloud environments.

## Results

- 100% flexibility through 100% virtualization
- speedy delivery, high-level automation and capacity planning extend the virtualized infrastructure
- Cost controls and an optional pay-per-use billing system in the private development & test cloud for the divisions of the Fritz & Macziol Group
- High degree of automation when resources are provided via a self-service portal
- Cost transparency, thanks to precise allocation of users and resources
- Secure client capability and flexible scalability of the infrastructure

