EXECUTIVE SUMMARY

Customer Name: RUN AG
Industry: IT
Location: Bolzano, Italy
Number of Employees: 48

Challenge
• Optimize resources and increase efficiency
• Scale for growth

Solution
• Cisco Data Center Business Advantage vision and architecture
• Single, cohesive data center environment based on Cisco UCS

Results
• Engineers spend 10 percent less time on resource management
• Adding new hardware takes 80 percent less time than before
• Server utilization is increasing due to extended memory

Challenge
The benefits of an innovative data center architecture are not restricted to large enterprises, as IT services provider RUN discovered when choosing a replacement data center platform. “We’re a relatively small company, and Cisco UCS was less expensive than we expected,” says manager Peter Werth. “It’s definitely a worthwhile purchase for a small business.”

RUN (Raising Unified Network) in northern Italy was set up in 2001 to deliver IT services to two local banks, which are still the company’s joint owners. RUN recently started expanding its customer base beyond the financial services industry, and its customers now include agricultural cooperative societies, hotels, and local government organizations as well as insurance companies and several banks.

Operating in the autonomous province of South Tyrol, RUN has a bilingual workforce and website to serve the region’s 500,000-strong population, which comprises speakers of German (the majority) and Italian (about a quarter). The company competes successfully with national service providers in its leased line business, offering a range of data connections with contact center support. IT services include hardware sales, integration, and installation, together with consultancy and network management and maintenance.

RUN’s strategy for business growth is focused on winning new customers from outside the financial services industry, and introducing new services in response to market demand. In order to support more customers and services, however, RUN needed to review its approach to data center planning, design, and management.

“Capacity was one problem: we were running out of resources and needed to purchase additional hardware,” says Werth. “Efficiency was another issue: we had too many servers for the services we were running, with very low server utilization levels.”

RUN was operating two data centers in different locations, using NetApp MetroCluster protection software to create a mirrored environment based on two physical servers at each site for full redundancy. In total, the company was running about 20 physical servers and 60 virtualized machines, and there were dedicated servers for some services and customers, including the two founding banks, although all customers shared the same networking infrastructure based on Cisco solutions.

“We offer high-quality IT services at a competitive price and, in order to continue doing this, we needed to make some economies of scale that would create a more efficient data center environment,” says Werth.
Solution
Having evaluated solutions from its existing server vendor and from Cisco, RUN chose the Cisco Unified Computing System (UCS) for its technical superiority, even though the Cisco solution was slightly more expensive. UCS utilizes the framework of the Cisco Data Center Business Advantage, a modular approach to defining an architecture and adopting the technologies that best suit an organization’s business needs.

“Cisco UCS was much more convincing than conventional blade systems from a technical point of view, particularly the concept of extended memory which allows better utilization of CPUs in a virtualized environment,” says Fabian Seyr, Project Manager, Business and Consulting Department. “Another interesting feature was the single management interface because it reduces the time you spend on admin. That is a big issue for a small company like ours, with relatively few engineers and an increasingly diverse service portfolio and customer base.”

RUN purchased the Cisco UCS B200 M2 Blade Server containing four half-width blades, each with two of Intel’s latest Xeon 5600 series multicore processors. The company installed the UCS in one of its data centers, which is the first node in its MetroCluster environment, and placed all four of its existing servers in the second node at the other site. RUN has already moved about 30 virtual machines on to the UCS platform and has created about 40 virtual servers, bringing the total on both platforms to about 100. The company has also moved some services over to UCS, including:

- The Cisco Unified Communications Manager application, which provides IP telephony services
- Cisco Unified Contact Center Express
- A new VDI service that RUN is currently testing.

Although RUN is currently using UCS in combination with the existing data center environment, the longer-term strategy is to replace the servers in the second node with UCS as well. In the meantime, RUN is putting all of its new services on to UCS and is also moving towards a fully virtualized environment, with most physical servers and dedicated resources gradually being phased out. Taking advantage of the built-in scalability of UCS, the company expects to add at least 60 more virtual machines to the current system before purchasing any additional blades.

RUN implemented UCS in one day, with help from a Cisco partner, in a fast and trouble-free deployment. “We installed UCS ourselves, although we had some support, and we were surprised at how quickly we did it and how easy it was to integrate UCS with our existing systems,” says Seyr.

Results
Because the UCS is a single, cohesive system that brings together computing resources, networking, virtualization, and storage, RUN’s engineers now spend less time on managing data center resources and more time on other tasks, including revenue-generating activities. Adding new hardware such as blades, for example, now takes about 80 percent less time than previously. “We haven’t been using UCS for long enough to have collected and analyzed a lot of data, but we estimate that our engineers are spending at least 10 percent less time on management,” says Werth.
In addition to making RUN more productive and therefore more profitable, these time savings also help to optimize the engineers’ skills, which is especially valuable in a region where it can be difficult to recruit bilingual people with the right qualifications. The unified environment of UCS also enables RUN to utilize the skills base within the company more effectively and flexibly. If one engineer is absent, for example, it is much easier to re-allocate tasks to other people because they are all equally familiar with UCS, instead of having individual areas of expertise.

UCS creates a more flexible platform on which RUN can expand and diversify the business, because it is not only possible but also easy to allocate resources dynamically and to re-use them whenever appropriate. Server utilization is improving due to the Cisco Extended Memory capability in UCS, which enables RUN to support more virtual machines by increasing memory, without adding more processing power. The company estimates that it is able to run between 30 to 40 percent more virtual machines on each UCS blade compared to its old servers. Better server utilization brings financial benefits too, by increasing the company’s return on its hardware investments and reducing the license costs for virtual machines, which are calculated on the number of processors. In the longer term, RUN will continue to benefit financially from a reduced need to purchase new hardware.

RUN is making better use of its people and its technical resources, while creating new services that will help generate more revenue. For example, the VDI service is an important offer that will not only attract new business but also enable RUN to introduce even more efficiencies, this time in its field operation. “VDI will make it much easier to manage our customers’ infrastructure centrally, without having to visit remote sites in order to solve problems,” says Werth. “Because our engineers will spend less time traveling, we will be able to grow the business without recruiting too extensively.” Extended Memory is particularly suited to running a VDI environment as it typically enables more desktops to be supported on any one compute platform.

Next Steps
In addition to making UCS its new data center platform, RUN is also considering UCS as a solution that it could resell to small business customers. “We see UCS as a double opportunity,” says Werth. “Firstly, it allows us to sell services faster, create new services such as VDI, and generate more revenue at reduced cost. Secondly, we could resell it to small businesses and offer consultancy based on our own experience of installing and using UCS in a production environment.”

For More Information
Details of the Cisco Data Center Business Advantage architecture and solutions are available at: http://www.cisco.com/go/datacenter
For more information on Cisco UCS, visit www.cisco.com/go/unifiedcomputing

Product List
Data Center
- Cisco UCS B200 M2 Blade Server with Intel Xeon 5600 series multicore processors