



Building a cloud

Cloud4Com establishes cloud computing service with support from Intel® Cloud Builders and the Intel® Xeon® processor 5600 series

Cloud4Com was founded in spring 2010 to deliver cloud computing solutions to medium-to-large-sized enterprises in the Czech Republic. Its central offering is its Virtual Data Center* service, an infrastructure-as-a-service (IaaS) solution that provides customers with remote access to the resources typically found in an enterprise data center on an on-demand basis. When developing the service, Cloud4Com became a member of the Open Data Center Alliance (ODCA) and used the market segment and technical insights this provided to ensure that the service was commercially-attractive and based on a sound technology platform. It deployed a Cisco Unified Computing System* powered by the Intel® Xeon® processor 5600 series and storage technology from Hitachi Data Systems to provide a powerful, flexible, and easy-to-manage platform for its Virtual Data Center service.



“The commercial insights we gained through our membership in the Open Data Center Alliance and the reference architectures provided by Intel® Cloud Builders proved invaluable to us when developing our Virtual Data Center service. Using the support provided by Intel, Cisco and others, we were able to implement an infrastructure platform that delivers all we – and our customers – need from the service.”

Jaroslav Hulej
Sales Director, Cloud4Com

CHALLENGES

- **Market segment insight:** As a new company looking to offer a new virtual data center service, Cloud4Com needed comprehensive insight into what its prospective enterprise customer base required from such a service
- **Solid platform:** It needed to ensure that the technology infrastructure in its data center provided a powerful and reliable platform to deliver all aspects of this service
- **Efficiency gains:** Operating efficiency is a priority for Cloud4Com and it wanted a solution that was powerful, energy-efficient, and easy to manage

SOLUTIONS

- **Sharing information:** To assist its research, Cloud4Com joined the ODCA and gained access to the latest market segment and customer insights
- **Technical guidance:** It used reference architectures from Intel® Cloud Builders when planning the technology platform for its service
- **The right choice:** Using these insights, it identified the Cisco Unified Computing System with 12 Intel Xeon processors 5600 series as the solution best able to offer the powerful, flexible, and energy-efficient server platform it needed for its cloud computing service
- **Unified networking:** To support this, Cloud4Com deployed a Hitachi Data Systems Adaptable Modular Storage* 2300 solution based on an Intel Cloud Builders reference architecture for unified networking based on 10 gigabit Ethernet (GbE)

IMPACT

- **The right offering:** By developing its service using the insights provided through the ODCA, Cloud4Com ensured its offering fits the needs of its enterprise customers
- **Power and flexibility:** Built-in virtualization support in the Intel Xeon processors 5600 series helps ensure the Cisco Unified Computing System delivers a powerful, flexible, and easily-managed solution for Cloud4Com’s service
- **Energy savings:** The power efficiency of the Intel Xeon processor 5600 series helps Cloud4Com minimize the costs of operating its processor-intensive cloud offering

Assembling a cloud service

Cloud4Com was established in early 2010 to deliver cloud-based IT infrastructure services to medium-to-large enterprises in the Czech Republic. Its central offering is its Virtual Data Center service, which gives customers access to data center infrastructure resources via an on-demand model, providing the additional capacity to support their own application processes. A key part of Cloud4Com’s business model is its ability to provide a dedicated, local service to organizations in the Czech Republic. By maintaining direct relationships with its customers, it is able to offer a better service that is aligned to their specific needs.



Cloud4Com uses technology and guidance from Intel to develop its Virtual Data Center service

Knowledge is power

From the outset, Cloud4Com understood that it needed a clear insight into what businesses require from cloud services in order to establish a commercially-attractive offering, and the right technology in its data center to be able to deliver this. To help achieve this, it became a member of the ODCA, an independent forum for cloud service providers, end-user organizations, and technology providers to share their insights into data center usage trends and access guidance on how to successfully implement cloud computing technology.

Cloud4Com was able to access first-hand insights into what enterprise customers, such as those it hoped to target, required from their data center resources and the technology needed to support this. Using technical information provided by Intel and other members, such as briefings on improvements to the energy efficiency and security of Intel's processors, Cloud4Com gained a clear understanding of how it should best establish its own IaaS offering.

Establishing a robust platform

These insights proved invaluable when it came to establishing Cloud4Com's first data center in Prague. It chose to implement the Cisco Unified Computing System containing 12 Intel Xeon processors 5600 series. This allowed it to prepare an effective, fully-automated data center infrastructure that provides the powerful, robust, and flexible platform needed for its Virtual Data Center service.

To support this fully-virtualized server environment, Cloud4Com chose to implement a Hitachi Data Systems Adaptable Modular Storage 2300 solution. Using a reference architecture provided by Intel Cloud Builders, it established a unified networking system based on 10 GbE technology to improve the overall performance of its data center infrastructure.

Delivering IT when it is needed

By building its data center infrastructure using proven techniques and technologies, Cloud4Com ensured it is able to deliver the high-performing, reliable service its enterprise customers need.

An important advantage for Cloud4Com is the simplified management processes the technology enables. The Intel Xeon processor 5600 series contains built-in support for virtualization environments, helping provide a more powerful, simpler solution to support its cloud computing service.

Cisco's Unified Computing System provides a platform that is much simpler to operate than traditional blade server deployments. Its central management processes (using Cisco Unified Computing System Manager*), stateless blades and Unified Fabric* infrastructure make it easier for Cloud4Com to deploy and maintain a scalable cloud computing solution. Compared to traditional blade server platforms, the innovative technology used in the Cisco Unified Computing System delivers a significant reduction in total cost of ownership (TCO).

When developing its data center, Cloud4Com was eager to keep the power consumption

Spotlight on Cloud4Com

Cloud4Com provides medium-to-large enterprise organizations in the Czech Republic with data center infrastructure-as-a-service solutions to support their business requirements. In addition to its Virtual Data Center offering, Cloud4Com also delivers consultancy and advisory services to customers looking to consolidate, relocate, or optimize their data center resources.

of its IT systems to a minimum. This proved to be an important feature of the Intel Xeon processor 5600 series, which is designed with energy efficiency in mind. By limiting the power draw of its cloud platform, Cloud4Com can keep operating costs down and boost its environmental credentials.

A complete success

As well as making sure it has the right technology in place, Cloud4Com has also been able to ensure its service delivers what enterprises customers need from an IaaS solution, following the market segment insights shared in the ODCA.

Following the success of its first data center, Cloud4Com plans to augment its existing platform with 50 additional servers, powered by the Intel Xeon processor 5600 series. It is also planning a second and third facility to deliver additional capacity and geographical redundancy within the Czech Republic. The IT infrastructure used in these sites will be identical, highlighting its strengths as a cloud computing platform.

Find a solution that is right for your organization. Contact your Intel representative or visit the Reference Room at www.intel.com/references.



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