

# Windows Azure Infrastructure as a Service Customer Solution Case Study



Telenor Uses Windows Azure Virtual Machines for Fast, Efficient, Cost-saving Development and Testing of company-wide SharePoint 2013 Platform.

**Customer:** Telenor

**Website:** <http://www.telenor.com/>

**Country or Region:** Nordic, Central & Eastern Europe, Asia

**Vertical Industries:** Telecommunications

**Business Need:** Support and Services

**IT Issue:** Virtualization, Internal Efficiency

## Organization Profile

Telenor Group, founded in 1885, is one of the world's major mobile operators with close to 150 million mobile subscriptions and exists to help customers get the full benefit of communications services in their daily lives. Telenor has mobile operations in 11 markets and an additional 18 markets through our ownership in VimpelCom Ltd. Telenor provides tele, data and media services in the Nordics, Central and Eastern Europe and Asia.

## Software and Services

- Microsoft SharePoint 2013
- Microsoft Exchange
- Windows Azure Infrastructure as a Service

## Business Situation

The Telenor Group is a Norwegian telecommunications company with worldwide operations serving almost 150 million mobile subscribers. To modernize its intranet and collaboration sites and deliver better search within and across business units, Telenor will soon migrate from the Microsoft SharePoint 2007 web application platform to SharePoint 2013. With 13 different business units spread across 12 countries, Telenor's prime business objectives were to improve collaboration and best practice sharing, bolster process efficiency, and facilitate a more agile and responsive organization. Through SharePoint 2013's enhanced capabilities, Telenor could also reduce significantly the complexity and maintenance cost of the 150+ custom features installed into its IT network. That network, with approximately 40,000 users, uses two SharePoint farms to support over 20,000 site collections, 70 Web applications, and 100 content databases.

Telenor's IT structure is highly distributed across their business units with ownership of corporate-wide initiatives held by a central team at the Telenor Group level. The various business units are empowered to make the best decisions for their particular business. While this structure fosters initiative, speed, and agility, it also results in decreased company-wide integration between business units (the classic IT tradeoff between individualized flexibility and central control.) Telenor sought to balance and mitigate this tradeoff by modernizing its shared infrastructure and processes so that its business units could still function independently but stay within an efficiently managed, cohesive, company-wide infrastructure.

To accomplish this goal, a Telenor project team estimated that over 80 servers, plus additional servers for load and scale testing of the architecture, would have to be brought online as part of developing, testing and running demos of SharePoint 2013. The time and cost of getting this huge infrastructure up, tested, and running was estimated to exceed any reasonable timeframe and budget using Telenor's standard IT approach. Furthermore, a SharePoint project of this size required a significant amount of server infrastructure across all environments, as well as inclusion of Active Directory and Exchange.

The project team quickly realized that they needed to take a different approach.

## Solution

Windows Azure Virtual Machines provided the solution sought by Telenor, one that enabling instant access and provisioning of virtual servers for installing and configuring SharePoint 2013 based on custom needs and design.

Windows Azure Virtual Machines made it possible to quickly create the development and testing environment essential to Telenor's successful deployment of SharePoint 2013. The expected 3-month window to set up the development and testing environment for a system of this size was reduced to 2 weeks, a huge savings not only in time, but in costs.

Windows Azure Virtual Machines is built on Windows Azure Infrastructure as a Service (IaaS), the open and flexible cloud-based platform that enables users to quickly build, deploy, and manage applications across a global network of Microsoft-managed datacenters.

SharePoint 2013 is a sophisticated product that integrates with other Microsoft products such as Windows/IIS, SQL Server and Active Directory. With SharePoint 2013, both a scale-up and a scale-out strategy can be adopted, meaning that the different parts of SharePoint can have multiple instances across different servers, either virtual or physical. For example, if a network needs more search servers, it's simply a matter of adding more servers running these components. For Telenor, development and testing SharePoint 2013 in Windows Azure Virtual Machines meant that IT could scale resources up or down, quickly and easily, with no up-front capital expense.

## Benefits

By utilizing Windows Azure Virtual Machines, Telenor has dramatically reduced the cost needed for test, development and demo environments, reduced the time to make the environments available to the project, and saved on long term investment in hardware that would have only be used in the short term.

With SharePoint 2013 running across its Windows Azure Virtual Machines enabled network, Telenor saw immediate benefits and ROI in four key areas:

**Resources** There were no longer any resource limits. All environments can be scaled down, or even removed completely and recreated, when needed.

**Speed** Because of virtualization and automation, physical servers and the time to acquire and provision them were no longer necessary. A whole server, including the installation and configuration of all software components on the server can be scripted. A complete SharePoint Farm can be fully automated and ready in just a few hours, not weeks.

**Cost** With Windows Azure Virtual Machines "pay as you go" structure, server resources can be switched on and off as needed to save money. Additionally, when additional servers are needed for scale and load testing over short periods of time, these units can be brought online as needed and then removed when finished, with only the actual usage time billable.

**Portability** In Windows Azure, a virtual machine is exactly the same as a virtual machine on Windows Server. It can be freely moved between on-premise physical servers, servers at a company's hosting providers, Windows Azure, and back again as need.

"Because of Windows Azure Virtual Machines, Telenor saved 70% on test, development and demo that could be turned off when finished to minimize their capital outlays," says Marius Pedersen, associate systems architect, Microsoft, Norway. "They loved how quickly they were able to implement, and the scalability of the solutions, all without the need for a huge capital investment. There was simply nothing else that could solve their overall big picture for this deployment like Windows Azure Virtual Machines."

"Testing a big new deployment like this is essential to success, but development and testing can take up a lot time and it normally requires that we buy many extra servers that, once testing is concluded, we don't really need anymore. And that costs us considerable money and other resources," Andreas Hogberg, Director, Telenor. "That's why Windows Azure Virtual Machines was such a good solution for us. We could develop and test using IaaS instead of investing in servers at our hosting providers. The time savings throughout the process was enormous. We're eagerly looking forward to taking advantage of all the benefits of SharePoint 2013."

Windows Azure Virtual Machines for development and testing delivers substantial benefits to any enterprise involved in team based development work through virtualization and automation. As savvy companies incrementally shift workloads to Windows Azure Virtual Machines to reduce costs and increase speed and agility, they'll reap even more of the benefits available from moving IT networks to the Cloud.

*writer: Robert D. Brilliant*