

# Türk Telekom

Türk Telekom streamlines testing for quicker time-to-market with Micro Focus® Service Virtualization.

### Overview

Türk Telekom is the largest integrated telecommunications company in Turkey. Türk Telekom has a rich product range within the scope of its mobile, fixed voice, broadband and TV service. With the vision of introducing new technologies to Turkey and accelerating the transformation of Turkey into an information society, Türk Telekom provides services in all 81 of the country's provinces with its team of more than 32,769 employees.

### Challenge

To maintain leadership in its highly competitive market, Türk Telekom must constantly introduce new services. Rapid time-to-market is essential but product testing was often held up by problems with accessing third party infrastructures.

**"All CRM and value added services are tested by our team. Gaining time and efficiency with Micro Focus Service Virtualization means more money earned by the company."**

#### HASAN YUKSELTEN

Release and Test Manager  
Türk Telekom

Telecommunications companies operate in an intensely competitive arena where rapid time-to-market for new services is vitally important. It's equally important that all new projects are validated before they go public so testing must be both rigorous and quick. This was the challenge faced by Türk Telekom. Türk Telekom delivers a wide range of services including fiber Internet, IP TV, Wi-Fi, 3G, online music and gaming platforms.

To stay ahead of the competition, Türk Telekom constantly launches innovative packages and that puts pressure on the 32 test engineers in Türk Telekom's technology division. They test more than 300 projects a year, mainly Customer Relationship Management (CRM) products but also value added and IP TV services. As part of the test process, engineers have to connect to third party infrastructures to obtain the information they need. This can include individual customer subscriptions which indicate what value added packages and special offers could be suitable for them.

"Most of the time we have problems with the other infrastructures due to such things as accessibility, authorization and downtime," explains Hasan Yukselten, Türk Telekom's release and test manager.



### At a Glance

#### Industry

Telecommunications

#### Location

Istanbul, Turkey

#### Challenge

Eliminate test delays caused by difficulty obtaining information from third party sites.

#### Products and Services

Service Virtualization  
Unified Functional Testing  
Application Lifecycle Management

#### Results

- + Eliminated wasted time which was running at 35 percent.
- + Automated over 50 percent of regression tests.
- + Increased test team productivity by 76 percent through eliminating waiting time access to third party sites.

**“Before we used a virtualization solution, four people in the team could run seven test campaigns a month. Four months after the implementation, this number doubled to 14 campaigns and a further four months on, the same team of four people could complete 19 campaigns in a month.”**

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Release and Test Manager  
Türk Telekom

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“We are very dependent on these third parties, but 35 percent of our time was wasted just waiting for the external infrastructures. Sometimes we had to wait for more than a week to access an external infrastructure and this was holding up time to market for new CRM products. To solve this problem, we decided to virtualize the third-party infrastructures in our test area.”

### Solution

Türk Telekom already used Micro Focus Business Service Management and Micro Focus Application Lifecycle Management so adding Micro Focus Service Virtualization was the logical next step. “It was important to look at all our systems,” says Yukselten. “We decided to go with Service Virtualization for its flexibility. We didn’t need to change our infrastructures to run it because it integrated easily with our other tools.”

Türk Telekom has positioned its new virtualization solution between its own service-oriented applications and the 21 third party infrastructures it accesses. The software picks up the appropriate responses and requests and learns to simulate the third-party infrastructures.

“We started to use the tool very quickly,” adds Yukselten. “In six weeks, we completed 45 percent of our virtualization and in four months, we virtualized 95 percent of our third-party infrastructures. We have so far virtualized 191 services of which we actively use 62 percent.

### Results

“The main benefit of using Service Virtualization is that we eliminated all that wasted time. It reduced from 35 percent to zero percent,” says Yukselten. “If there are problems with third party sites, engineers just simulate them and we go on testing.” Productivity has also increased dramatically. Before using Service Virtualization, Türk Telekom’s CRM team could run an average of 2,870 end-to-end tests per month. After implementing Service Virtualization, the same team executes an average of 5,040 end-to-end tests per month. A test engineer who could previously run 8.5 tests a day can now execute 15 a day and these figures represent a 76 percent increase in efficiency.

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Increased efficiency has been partly due to automation. The team is now able to make better use of its Micro Focus Unified Functional Testing automation software. Previously, due to discreet systems, engineers could not implement end-to-end automation. Now it has automated 52 percent of regression tests, saving the work of three people a month. This

has also enabled the team to double the number of defects detected.

Türk Telekom has a main revision release each month. Before Service Virtualization, it could include ten change requests, or test projects, in one deployment. Now, that figure has increased to 25. Some test projects that used to take up to three months can now be completed in two to three weeks. Efficient and speedy testing also enables Türk Telekom to comply with market regulations.

Streamlined test processes have been very beneficial to the business as Yukselten explains: “Our work is really important because the development of CRM systems, all campaigns and all value-added services have to be tested by our team. Using virtualization enables us to bring things to market more quickly. Before we used a virtualization solution, four people in the team could run seven test campaigns a month. Four months after the implementation, this number doubled to 14 campaigns and a further four months on, the same team of four people could complete 19 campaigns in a month.

“If we complete more test campaigns, then this results in more revenue drivers. There is a lot of competition in the market. Our competitors also supply new opportunities to their subscribers every month. If we can decrease our time-to-market, then we can protect our existing customer base and also attract new subscribers.”