# Hedensted Kommune
Denmark

## Background
The local government authority (Kommune) for the Danish city of Hedensted has more than 45,000 citizens. Hedensted Kommune takes care of all kinds of services for citizens, from birth certificates and building legislation to children's day care, homes for elderly people and schools. The Education Department of the Kommune has schools in more than 20 locations, spread over a long and narrow area along the east coast of the Jutland peninsula in Denmark.

## The Challenge
In January 2007, three smaller local government authorities were merged into one, Hedensted Kommune. At that point, the newly formed Kommune proposed a tender for its new IT infrastructure. The new solution had to build on a proven common platform that already existed in one of the merging organizations. Requirements for the new architecture were the inclusion of Microsoft App-V (formerly SoftGrid), and the seamless integration of additional tools.

The Education Department at the Kommune is responsible for all the schools in the area. "As we are geographically scattered, we used remote control as much as possible, because traveling to these remote locations to install or administer educational applications is very ineffi cient," said Thomas Skovgaard, IT Consultant at Hedensted Kommune."We were looking for a way to centralize as much of our IT infrastructure as possible, without excluding the possibility of using local applications."

Some applications need to run on local systems because they are unique to a specific school. Other aspects, such license restrictions or low bandwidth to some locations, may also prevent applications from running from a central location.

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>
> *– Thomas Skovgaard, IT Consultant*

## The Solution
After a presentation to the local school boards, ITX was selected to support Hedensted Kommune with the project. ITX translated the demands into a solution and developed a new architecture. ITX suggested including RES Workspace Manager for user workspace management and for the seamless integration of local and centralized applications using Virtual Desktop Extender (VDX) technology.

At the education department of Hedensted Kommune, ITX deployed an environment based on Windows Server 2003 servers and terminal server, Microsoft App-V and RES Workspace Manager. Today, the organization has over 30 servers in an environment that is both centralized and decentralized.

The main datacenter is located in the basement of the town hall, and for bandwidth reasons secondary file servers and terminal servers are installed in a number of schools. Thanks to a smart replication strategy for data and applications, the complete infrastructure acts as one large application farm.

Employees and students use an RES Workspace Manager-powered virtualized desktop on a terminal server from a mixture of about 900 PCs, 650 laptops and 100 thin clients. Hedensted Kommune handles the daily administration, assisted by ITX, who visits Hedensted Kommune once a month.

## The Benefits
RES Software:

- Seamlessly integrates server-side and client-side virtualized applications
- Enables application license compliance

- Eliminates the need for scripting
- Simplifies administration of application and configurations

RES Workspace Manager enabled Hedensted Kommune to mix both centralized and decentralized applications in a completely transparent way.

"We needed the freedom to choose the best way to deliver applications, centralized or locally," added Thomas Skovgaard, IT Consultant. "RES Workspace Manager presents a consistent workspace to every user with only those applications that a school actually needs. Depending on the configuration, a server-side terminal server application or a streamed client-side application is started. By virtualizing and running applications on local PCs and displaying them on the desktop using RES Virtual Desktop Extender (VDX) technology, we still benefit from all the typical advantages of terminal servers."

The source of the application is invisible for the end user. The local application is presented on the virtualized desktop and integrates seamlessly with the user´s workspace running applications on a remote (terminal) server. RES Workspace Manager also enables Hedensted Kommune to deploy expensive application such as Pascos DataStudio or Jascs Paint Shop Pro to one school during one week and then to another school the next week.

Skovgaard said, "Because we limit access to one school at a time, this is completely compliant with the application license."

Other educational applications are only needed in one school. RES Workspace Manager ensures that only

the school with a valid license is able to use the application. Previously, the process of deploying and administering applications was a complex one, with a lot of stability issues.

The organization could also not afford to provide full technical IT expertise at all its schools, and it was very inefficient for IT staff to visit all the schools to troubleshoot or make configuration changes. With RES Workspace Manager, all changes are made centrally and implemented on the local systems on the fly.

"The management console of RES Workspace Manager is very easy to learn. We took a one-week course to learn the terminology, and after that we almost immediately became expert users. We now publish and deploy terminal server applications as well as Microsoft App-V applications from one unified console. We are very enthusiastic about RES Workspace Manager, which has proven to be a cost efficient open platform with almost no technical limitations and an extensive list of features."

Managing default printers and printer queues, which previously was very time-consuming, has become so easy with RES Workspace Manager, that even new IT staff can handle this task immediately. RES Workspace Manager also handles important configuration options such as environment variables and registry settings. With RES Workspace Manager it is no problem at all to have different Internet Explorer settings for different schools or even for individual students, all without writing one line of scripting code.

"We thought a transparent infrastructure combining centralized and decentralized elements would not be possible with the limited resources we have available," Skovgaard said. "However, RES Software did make it possible, and in a cost efficient way, without even having to cut back on functionality or having to expand the IT staff."

## About RES Software

*RES Software, the proven leader in dynamic desktop solutions, is driving a transformation in the way organizations manage, maintain and reduce the cost of their desktop infrastructure. The RES Software award-winning, patented products enable IT professionals to manage and deliver secure, personalized and compliant desktops independent of the underlying computing infrastructure – thin clients, virtual desktops, physical desktops, or server-based computing environments. The company empowers customers, from small to medium-sized businesses to global enterprises, to reduce desktop complexity and meet the essential needs of a dynamic workforce that requires on-demand access to their personalized workspaces. For more information, follow updates on Twitter @ressoftware and visit www.ressoftware.com.*