
Executive Summary

IT departments are continuously changing their desktop infrastructure following requests for new functionality, cost savings and overall quality improvements (e.g. integrity and performance). These days, such changes often have an impact on the way end users work with desktops.

Some examples of potential desktop infrastructure changes are:

- Centralization through virtual desktop computing / hosted desktop computing
- Upgrade from Microsoft Windows XP to Microsoft Windows 7
- Upgrade from Microsoft Office 2003 to Microsoft Office 2010
- Implementation of location-based printing
- Implementation removable disk security

The first three examples represent comprehensive projects involving moving end users to a “new” desktop infrastructure. The complexity of these projects makes them difficult to plan and control due to the time and resources required, which means the impact on the end user’s productivity can be substantial and unpredictable.

The last two examples of changes - implementation of location-based printing and the implementation of

removable disk security - are often solved using so-called “point solutions”. A point solution is standalone technology for a specific problem often requiring additional management and understanding. Multiple point solutions are difficult to sustain in the long run. They lead to more complexity and increase the overhead costs of operating desktop infrastructures and IT departments.

In order ensure that the transition to a new or improved desktop infrastructure runs smoothly, user workspace management solutions as essential. Once user workspaces are in place, any component of the desktop infrastructure can be replaced without impacting user productivity or losing maximum control throughout the transition process.

Desktop Transformation solves the problem of how to make the move from a desktop situation to managed user workspaces. This technology enables IT professionals to transform desktops into managed user workspaces step-by-step, while maintaining a clear picture of the effects each action has.

This paper describes the concepts of Desktop Transformation and how Desktop Transformation technology can help organizations progress towards managed user workspaces without having a negative impact on user productivity.

What is Desktop Transformation?

Desktop Transformation is the step-by-step transformation of static, user- and computer-centric desktop items into a user workspace that allows dynamic, context-aware and independent access to any configuration of applications, data and printers without changing the following:

- Desktop and application delivery infrastructure
- Operating system
- Applications (version)

The user workspace does not substitute the desktop; instead it works dynamically with it to manage desktop items independently from the underlying computer and user technologies.

The desktop transformation process consists of 5 consecutive steps:

1. Gather live data from existing desktops
2. Analyze the data for context
3. Create workspace items and review impact
4. Set up the workspace model
5. Transform existing desktops in small steps, by focusing on today’s challenges first

Gathering Live Data

To get from the current desktop situation to managed user workspaces without impacting users, it is essential to gather information about how desktops are currently being used. This information can be gathered in the form of desktop samples, which are

created by Desktop Sampler. This runs unobtrusively as a standalone component on users' desktops.

The samples hold encrypted information on available desktop items, such as applications, mappings and printers, as well as a user's context (name, group membership, IP address, type of computer etc.). This information is stored in a central location.

Analyzing the Data

The Workspace Designer, a Desktop Transformation component which is a part of the management console, helps IT professionals set up user workspaces. First of all, the IT professional sets up how context should be established for:

- Directory services
- Location and devices

The Workspace Designer then analyzes the context information in the desktop samples and suggests suitable rules for establishing context.

The IT professional is now ready to start analyzing desktop items and starts off by selecting a category:

- Applications
- Data Sources
- Drive and port mapping
- Drive substitutes
- Printers

The Workspace Designer then analyzes the samples and provides a list of items found (from most common to least common).

Creating Workspace Items

The IT professional selects one desktop item from the list for further processing. The Workspace Designer compares each possible context with the actual desktop samples and analyzes:

- Which users have access and would keep it
- Which users have access but would lose it
- Which users that currently do not have access would be given it

This information allows IT professionals to pick the right set of suggested access rules. The Workspace Designer creates and configures the new workspace item according to the chosen desktop item and the access rules selected.

Setting Up the Workspace Model

The Workspace Model, another Desktop Transformation component of the management console, enables IT professionals to control which parts of the user workspace will be composed and secured by the Workspace Composer. These managed workspace items will co-exist on a user's desktop with all the unmanaged workspace items, so that any impact is minimal.

A mix of different workspace models can accommodate different kinds of users and desktops. A workspace model evolves over time, so a transformation can now be controlled step-by-step, tackling one challenge at a time.

Transforming the Desktop

The Workspace Composer running on the Windows desktop will use the workspace model and other information from the management console to establish the context of the user and to compose and secure the user workspace (or parts of it being managed at the time) without altering the rest of the desktop.

Components of Desktop Transformation

Desktop Transformation consists of the following key components:

- Desktop Sampler
- Management Console
- Workspace Designer
- Workspace Model
- Workspace Composer

Together, these components ensure a successful and safe transformation from the current desktop situation to managed user workspaces.

The Desktop Sampler is standalone technology capable of unobtrusively collecting information on how existing unmanaged desktops are being used. The information that is collected is stored in a central location for later use by the Workspace Designer.

IT professionals use a management console to create a list of all possible desktop items that need to be composed and secured in a user workspace. This console is the main interface for IT professionals. It features the Workspace Designer that helps IT professionals create workspace items.

The Workspace Model controls which items should be composed and secured. It is the only place IT professionals need to go to manage user workspaces. The management console stores all the supplied information in a database.

Each desktop with the Workspace Composer installed has an agent service that retrieves the information from the database and stores it locally. The

Workspace Composer running on a Windows desktop will use this local information and the context of the user to compose and secure the user workspace, or parts of it. As someone works in their user workspace, information is collected by the Workspace Composer in transactions. These transactions are applied to the central database by the agent service whenever it can access the central database.

Conclusion

Desktop Transformation solves the problem of how to make the move from a desktop situation to managed user workspaces.

By using the Desktop Sampler, the Workspace Designer, and the Workspace Model together, IT professionals are able to transform desktops to managed user workspaces step-by-step, while monitoring each action's effects on users.

Desktop Transformation is an integral part of RES Workspace Manager 2011 user workspace management software from RES Software. For more information please visit www.ressoftware.com. In addition to learning more about Workspace Manager, you can also download a 60-day evaluation version, so you can see for yourself how Desktop Transformation can help your organization.

RES Software

[RES Software](http://www.ressoftware.com), 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](https://twitter.com/RESSoftware) and visit www.ressoftware.com.