Combining Novell ZENworks and Immidio Flex+ to Manage the User Workspace

If you currently work with Novell® ZENworks® and manage your IT infrastructure’s front end, you can probably pinpoint user workspace management challenges.

Providing a dynamic Windows desktop experience tailored to users’ situations and based on aspects like roles, devices and locations is very complex. IT infrastructures are composed of many components. The two primary component types are centrally hosted workspaces like terminal servers and local devices like laptops and desktops.

This whitepaper will discuss how to manage stationary and roaming users, while still providing a consistent experience, regardless of whether they use a terminal session or work from a laptop or desktop. You will also learn how Immidio Flex+ can work with Novell ZENworks to deliver the very best user experience.
Introduction

User workspace and profile management has always been a real challenge because Microsoft doesn’t provide tools to implement a real solution. Roaming profiles can easily become bloated and cause long login times and profile corruption. Also, profiles can’t roam between different versions of Windows, like Windows XP and Windows 7. Therefore, users become frustrated and confused because they have different profiles for each environment.

This whitepaper describes how existing Novell ZENworks customers can use Immidio Flex+ to solve these profile problems and to manage the complete user workspace.

Novell ZENworks Configuration Management
You’re probably already familiar with the great functionality of Novell ZENworks. With ZENworks, you get full lifecycle management capabilities for all your systems, beginning with OS deployment when you add new computers to your infrastructure. During the lifecycle of your machines, ZENworks provides many deployment capabilities that provide the right applications, patches and even some user settings like shortcuts.

You can use ZENworks to manage everything you need to take care of at a system level—but what happens when a user logs on? In that case, you also have to manage the user environment or workspace. How do you manage user profiles and allow users to roam between different devices and versions of Windows?

Immidio Flex+
Novell ZENworks does a wonderful job managing systems and client devices, but it doesn’t support roaming users, which is increasingly vital with the introduction of stateless user sessions like virtual desktop instances (VDIs). Therefore, to offer users a consistent user experience on any Windows device, you need a workspace virtualization solution.

Flex+ is a perfect supplement to ZENworks Configuration Management. It allows users to maintain their profiles regardless of the device, OS version or application instance because it disconnects user-specific desktop and application settings from the Windows OS.

Flex+ offers a desktop that adjusts to the situation of your end user, providing access to required IT resources based on a user’s role, device and location. Many organizations feel their productivity draining away due to ad-hoc activities like manually mapping network drives and printers or providing app shortcuts to users—but Flex+ cuts that drain to practically nothing.

Flex+ consists of five functional areas: Application Configuration Management; User Environment Settings; Personalization; Application Migration and Dynamic Configuration. Below, we’ll discuss some of the most commonly used features.
Central Management

About ten years ago, when roaming profiles were still the only option available, the Flex Profiles Toolkit enabled users to roam between terminal server sessions and minimize login times. This is now Flex+ which offers faster login times than before, roaming capabilities and a lot of other features.

You can configure all the features in Flex+ with a very simple and intuitive management console.

Managing the Environment from One Console

Who, Where, What?

The most important part of Flex+ is the flexibility, just as the name implies. Everything you configure within Flex+ can be filtered with built-in conditions. No matter who logs on, from where or what device, the user will receive only the relevant information for his or her current situation.

Flex+ Condition Sets allow administrators to combine conditions based on user, location and device characteristics to dynamically adapt the content and appearance of a user’s desktop. For example, you can provide access to a network printer based on the user’s current location, or create an application shortcut on the desktop based on the user’s identity. Flex+ can then evaluate conditions once users unlock their workstation or reconnect to a remote session. This way Flex+ can refresh the user workspace during the session and always show the relevant information.

You can centrally manage condition sets from the Flex+ Management Console, and can apply them to all configurable items within the system.

Application Configuration

While ZENworks is great at delivering applications to computers, it’s a little more difficult to perfectly customize applications to the user’s needs. With Flex+, it’s possible to preconfigure applications so each user gets the right application settings.

Traditionally, administrators configure applications during the application packaging process. But this process is inflexible—and to complicate matters, you often need the functional application owner during the packaging process. This is particularly difficult if your organization outsources the packaging. Plus, if you make a change to the application settings—like setting the language—you need to deploy the entire package again to all your computers.

Flex+ makes it possible to create application settings independent of the packaging process and deploy them separately to only the right users. Administrators have the ability to add multiple different configurations even to a single application, so it’s possible to provide each user group with an individual configuration. For example, you can give test users different configuration than production users. This lets you drastically reduce the number of application packages, resulting in lower packaging costs.

User Profile Management

Flex+ Personalization decouples and segments user-specific desktop and application settings from the Windows OS—this makes them available across multiple devices, versions of Windows and application instances. When administrators make personalization independent from traditional user profiles, managing virtualization technologies and application delivery mechanisms becomes much simpler. Flex+ Personalization integrates seamlessly with native and virtualized applications, providing users with a consistent experience across any Windows platform, be it physical, virtual or remote. Additionally, it enables painless upgrades and migrations like those from Windows XP to Windows 7 or 8, or migrating between App-V 4 to App-V 5.
Flex+ Application Configuration Management enables you to configure the initial application settings without having to rely on the app’s defaults. You also have the option to use predefined settings as one-time defaults or set them each time the application starts, thus guaranteeing application settings are always in the exact same state. A hybrid approach is also possible: define which application settings can be personalized, which can be partially personalized and which must always remain at initial values.

It’s fairly simple to capture predefined settings for an application using Immidio Application Profiler—simply run the application on a reference system monitored by Application Profiler and configure it as desired.

Administrators can also use Flex+ to manage certain user-environment settings when a user launches an application. Some setting includes mapping drives and printers, applying custom files, registry settings and running custom tasks. Admins can even configure Flex+ to undo these settings when the user exits the application.

Support the User Profiles
Because Flex+ stores user profiles in a compressed and segmented way, profile corruption is not likely to happen. But even if you have to troubleshoot profile problems you can manage the user profile on a per-application level. You can easily reset an application back to defaults or restore a backup of the profile settings from yesterday or the day before that, while leaving the rest of the profile intact.

The Immidio Flex+ Helpdesk Support Tool provides support capabilities for Flex+ profile archives and profile archive backups through an intuitive graphical user interface (GUI). It also provides some analysis functionality by displaying total profile archive sizes for a user and an integrated FlexEngine log file viewer.

Administrators can use the Flex+ Helpdesk Support Tool themselves or can make it available to another department in charge of providing personalization support.

Helping Users

Users can also support themselves by using Flex+ Self-Support. They simply start the tool, select the application and click reset or restore and select the day of the backup they wish to restore.
Helping Users Help Themselves

Figure 3. Optionally, users can maintain their own profile settings with 'Flex+ Self-Support'.

What Happens When a User Works Offline?
The Immidio Flex+ SyncTool provides synchronization capabilities mostly targeted to laptop users and to users connected to a network with limited bandwidth. It synchronizes both the Flex+ profile archives and the central Flex+ configuration files to a local cache, giving users the ability to work offline anytime, anywhere.

The Flex+ SyncTool is specifically built to support the following scenarios:

WORKING OFFLINE
Users with laptops that are not always connected to the corporate network need access to their Flex+ files while offline. The Flex+ SyncTool makes all files available locally and synchronizes the changes when the user connects to the corporate network again, directly or over Wi-Fi using a VPN.

SLOW WAN OR LIMITED BANDWIDTH
Users connected to the central Flex+ Configuration and Flex+ Profile over a slow WAN connection can experience slow performance. What’s more, constantly roaming personal settings can consume too much of the network’s resources. To optimize the user experience and limit network traffic, users access all Flex+ files from the local cache, and Flex+ will only synchronize them based on configurable network thresholds.

What Do You Need to Get Started?
Not much! That’s the good news. Because Flex+ uses your existing infrastructure, you can implement Flex+ in any existing ZENworks environment. There is no need to deploy additional backend servers. Flex+ uses only file shares to store the central configuration and the user profiles. This makes Flex+ a scalable solution that can work in any environment.

This means that any ZENworks customer can start using Flex+ right away and offer the flexibility and features of Flex+ to users.
About Pim van de Vis
Pim van de Vis uses his experience as consultant to deliver technical sessions and has spoken at various events. Pim has experience in many different IT infrastructures and mainly focusses on virtualization and management products, such as Hyper-V, App-V, XenDesktop and System Center.

Pim van de Vis is IT architect at Immidio and helps customers and partners with the design, training and implementation of Flex+.

You can reach Pim on Twitter: @pimvandevis

About Immidio
Immidio is the inventor of profile management with its famous Flex Profiles solution. Continued development has resulted in Immidio Flex+, a mature workspace virtualization solution. Flex+ is simple to operate and scales seamlessly within existing environments because it does not require any backend infrastructure. More than 500 customers worldwide are using Flex+, several of which have 100,000+ user implementations. Immidio has a long lasting partnership with Novell and Immidio Flex+ is by far the most affordable solution available.
By engaging Novell Services for Premium Support, Consulting or Training, we can help you get the most of your product investment to suit your business needs. Please contact us today, or contact your local Novell Solutions Provider:

Premium Support and Consulting:
1 800 714 3400 U.S./Canada
1 801 861 4272 Worldwide
crc@novell.com

Training:
1 800 233 3382 U.S./Canada
1 801 861 3381 Worldwide
training@novell.com

Novell, Inc.
1800 South Novell Place
Provo, UT 84606 USA

www.novell.com