



Reading Plus®

**Support Document : Windows Profiles and their impact on Reading Plus®**

October 30<sup>th</sup> 2007

## **Windows Profiles and their impact on Reading Plus®**

### **How does Windows profiles and Java caching impact Reading Plus®?**

Reading Plus® online is a browser-based application comprised of multiple java applets (jar files) that are run through the client browser's java virtual machine (JRE). The applets are delivered on demand, based on client request. After the applets have been downloaded to the client, all subsequent requests for the applets, from a particular client, are pulled from the local cache on that computer. These applets average 1MB in size, and the initial downloads contains roughly 3.5MB of applets and resources.

The applications only need to be downloaded once per workstation. If the workstations have to repeatedly download these applets, the students may experience long load times.

### **Profiles**

There are two types of Windows profiles, local and roaming (default for most users).

#### **Roaming Profile**

Roaming user profiles are simply collections of settings and configurations that are stored on a network location for each user. Once you perform some fairly simple configurations, every time a user logs on to a machine in your domain with their domain credentials, that user's settings will follow them and automatically be applied to their log-on session for that particular machine.

If Roaming Profiles are used, the java cache directory points to a local user directory for the java cache on the workstation. This cache directory does not get updated on the Roaming Profile. This means every time a user logs into any workstation (even the same one twice in a row) they will need to download the java applets. This will require unnecessary Reading Plus® applet downloads.

#### **Local Profile**

Local user profiles are settings and configurations that are saved on a particular machine and do not follow a user as they move from location to location. Each network location will have a different set of user settings and configurations.

If Local Profiles are used, the java cache directory will exist for all users that use a particular workstation. These local profile java cache directories will not travel with the users from workstation to workstation. This will require unnecessary downloads and extra copies of Reading Plus® applets on the workstation.

### **How to configure Windows Profiles effectively for Reading Plus® Instruction:**

#### **Solutions for Local Profiles**

Local profile issues can be hard to solve. Each user will have their own unique profile on every workstation. This means every user will have their own copy of Reading Plus® applets on every workstation they use.

If smaller lab settings, this will eventually work out, users will eventually use all workstations and will have a copy of the applets on every machine in the lab.

One approach is assigning a particular workstation to a student. If they login to the same workstation every day, they will only have to download the applets once, on that particular computer.



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Another approach for Local profiles is implementing a login that is assigned to the workstation.

#### **Logins assigned to workstation**

If the lab is configured that each workstation has its own network login and not each user, ex: login: computer1, password: computer1, there will only be one profile per machine. The java cache will remain with every student login, as long as they login with the workstation username and password.

#### **Solutions for Roaming Profiles**

The default java cache directory exists within the user's profile. If this directory is changed to point to a non local user directory, it will not be updated by the Roaming Profile. This will allow for the Reading Plus® applets to be downloaded once per workstation and shared for all users on that workstation.

Ex. The default location for the java cache directory is: C:\Documents and Settings\[User]\Application Data\Sun\Java\Deployment

If this is changed to : C:\JavaCache\, it will not be updated by the Roaming profile and applets will be pulled and shared from this location. Please see the section titled "*Changing Java's Default Cache*".

Care should be taken that this directory is local to the workstation and not across the network. If a shared network resource is used, this could create internal bandwidth issues. Every user will be pulling Reading Plus® applets from the same directory.

#### **Changing Java's Default Cache**

Link from Sun : <http://java.sun.com/j2se/1.5.0/docs/guide/deployment/deployment-guide/properties.html>

Located in the users profile directory is a file called deployment.properties.  
<User Application Data Folder>\Sun\Java\Deployment\deployment.properties

This is a text file, open the file in a text editor.  
Locate the entry labeled: deployment.user.cachedir

NOTE: This entry may not exist. If the entry is not found in deployment.properties add the entry to the file:  
deployment.user.cachedir=

Change that directory to a non-user level cache directory: Ex. C:\JavaCache\  
Save the file.

This must be repeated or copied for all users.