



Technical Rating: [Support](#) [Print This Page](#) [Add to 'My Library'](#) [Forward to a Colleague](#)

Guidelines for optimising RM Kaleidos® Learning Platform performance

Published Date : 26 Mar 2008 Last Updated : 15 Aug 2008 Content Ref: TEC1118471

Operating System	(All)
Part No	(none)
Summary	Applicable to Kaleidos Learning Platform Portal+ Version 1. Guidelines for what performance you should expect from RM Kaleidos® Learning Platform and how to optimise the performance of Internet Explorer for use with RM Kaleidos® Learning Platform.

:: Requirements

Introduction

The Learning Platform is a Web application delivered over the Internet and its performance is dictated by the Internet connection over which it is delivered, as well as how the application itself operates. This article is designed to ensure you optimise the performance of the Learning Platform for your school. It will help you understand what sort of performance to expect and therefore whether there is a technical issue to be resolved.

How quickly a requested page is displayed will depend on a number of factors including;

- 1 the size of pages being viewed - big pages take longer to serve along the Internet connection.
- 1 the type of pages being requested - complex pages take time to prepare at the data centre.
- 1 the amount of Internet bandwidth available to your school - a 2 Mbps feed will serve pages slower than 8 Mbps.
- 1 the amount of bandwidth being consumed within your school - if a lot of users are demanding a lot of data from the Internet this can use up the available bandwidth.
- 1 any caching within your school and how effective it is - cache servers do not cache secure Web site content (ie that delivered over https).
- 1 the specification of the computer being used for browsing - processing and displaying pages uses computing power; the better the computer the faster a page will be displayed.

What you need to do

To optimise the experience for your users you need to:

- 1 ensure the following settings are applied in Internet Explorer and,
- 1 ensure you have an adequate Internet feed and sufficient bandwidth available by measuring it.

These settings are applicable to Internet Explorer® 6 and Internet Explorer® 7.

Internet Explorer settings

Much of the content delivered by the RM Kaleidos Learning Platform is delivered over a secure Internet connection. Browser settings must be configured in order to maximise the amount of static data that is cached on the computer being used. These settings will dramatically improve performance during a session.

- 1 Internet Explorer - ensure "Do not save encrypted pages to disk" is NOT checked (ie OFF).
- 1 Internet Explorer - ensure "Use HTTP 1.1 through proxy connections" is checked (ie ON).
- 1 Internet Explorer - ensure Temporary Internet files - "Check for newer versions of stored pages" is set to "Automatically" and that "Disk space to use" is set to 150 - 250 MB.

This procedure is covered in detail in TEC1045855 which can be accessed from the 'Other Useful Articles' section below.

Internet speed

Measuring your Internet speed is not an exact science as it can vary during the day depending on load within

your school, but you can form a good impression by completing the generic tests outlined below.

The best thing to do is to measure the speed (see Measuring Internet Speed below) at a number of stations during general use of the network and general use of the Learning Platform. Once you have applied the settings described above then a measured speed of 256kbps or better on a workstation should provide good performance for most of the RM Kaleidos Learning Platform pages.

What you need to know

The Learning Platform allows the administrator to customise shared pages, ie pages seen by all your portal users. This is great for ensuring the pages meet the specific needs of your school but it does require some thought about which elements to put on pages.

Page content

The first page a user loads after login depends on their role; Staff, Student or Parent. These role based pages should be designed to load quickly so that users can log in to the Learning Platform quickly. There are some elements which, if added to the role based page will slow down login times. If you find that it is taking a while for users to log in, consider checking if these elements are present on the page and move them; examples include:

- 1 RSS Feeds - if an RSS feed is no longer available or comes from a slow Web site this can slow your page.
- 1 Page Viewer Web Part - as with RSS Feeds, if you view an external page and it is from a slow or unavailable Web site then your page can take a long time to load.
- 1 Outlook email or calendar - it is possible to use the Content Editor Web Part to view your local Outlook folder, this can sometimes take some time to load.
- 1 Large Items - if you add large items to your page such as very high resolution graphics this can slow down the time it takes for your page to load, optimise your graphics for delivery over the Web - you should try to compress pictures to less than 50k and around 450 by 340 pixels.
- 1 Animations, slides, Adobe® Flash® applications - some of these may be fine but it is worth checking if you have already checked everything else.

It is a good idea to experiment with new content on a separate page first to see how it performs. If one of your pages is loading slowly check the performance of a standard RM Kaleidos Learning Platform page, remove any customisations and extra Web parts and check the performance.

Internet speed

If you measure a speed of 256Kbps or better and you have applied the best practice advice, then users of that computer should expect good performance from the Learning Platform.

Theoretically a school with an 8Mbps feed could support around 30 computers accessing a page from the RM Kaleidos Learning Platform in the same instant. In reality this feed will support more users as demand to download pages will be spread more widely across a time period. We would expect the number of supportable users to be higher by a factor of five or more, but your experience will depend very much on usage patterns. If other users are using the Internet to access other pages then this will also be sharing the 8Mbps feed.

:: Procedure

Measuring Internet speed

The objective for these diagnostic tests is to ascertain the available bandwidth of your school's Internet connection and how it is affected by multiple users. If you are getting a lower than expected speed then contact your ISP.

Speed test

Use the following site to record a series of speed tests in your school:

<http://www.speedtest.net/>

Test as follows:

1. On one workstation, five sets of results during the day.

2. On ten workstations simultaneously, three sets of results during the day.
3. During any period of poor portal performance, stop all portal sessions and test.

This site will recommend a server to test against (shown as a pyramid in Orange). Once the test is complete the results will be displayed, and will record the following:

1. Download speed in kb/s
2. Upload speed in kb/s, ISP
3. Server
4. Ping
5. Distance

Speedtest.net saves the results for you. Record the URL using the Direct Link, Copy button eg

<http://www.speedtest.net/result/233961812.png>



Speedtest.net also saves a results history, so test results over a period of time can be collected and reviewed. Use the download as CSV option at the bottom of the My Results page.

Download speed

As a comparison to the speed tests, complete a series of download tests using the following site:

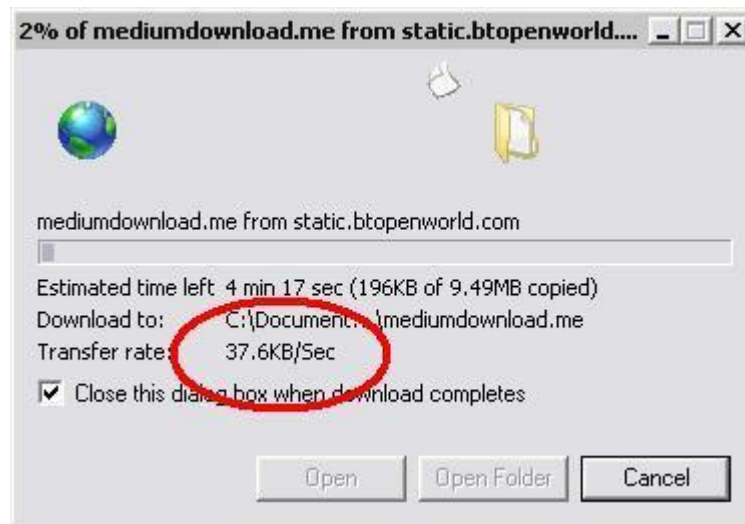
<http://www.btopenworld.com/speedtest>

Test as follows:

1. On one workstation, five sets of results during the day.
2. On ten workstations simultaneously, three sets of results during the day.
3. During any period of poor portal performance, stop all portal sessions and test.

Click on each of the files in turn (small, medium, large) and when prompted click Save (choose a convenient location and delete the file later). Record the following

1. Transfer rate (roughly) - record whether this is KB/sec or MB/sec



2. Record how long the download takes for each file size.

If you need to log a call relating to RM Kaleidos Learning Platform performance with RM Support, this information will be required.

Other Useful Articles

['The page contains both secure and nonsecure items' warning when browsing the RM Kaleidos® Learning Platform portal](#)

(TEC1122022)

[RM Kaleidos® Learning Platform - Optimising performance with Microsoft® Internet Explorer®](#)

(TEC1045855)

Please read - important disclaimer information.

http://www.rm.com/_RMVirtual/Includes/csredirect.asp?cref=&title=Standard Content Disclaimer

[Top of page](#)

[Forward this page to a friend](#)

© RM 1997 - 2009

[Terms and Conditions](#)



[Privacy Statement](#)