



WEBSITE MONITORING

5 KEY AREAS TO MONITOR

Possible causes of **Web Application Performance** issues and how to proactively monitor

CSS ISSUES SYMPTOMS

- Worldwide
 - United States - English
 - United Kingdom - English
 - Australia - English
 - Deutsch
 - Français
 - 日本語
 - Português
 - 中文
 - Log In
 - Customer Portal
 - Community
 - Partner Portal
 - Welcome! Use the login menu to access:
 - Customer Portal
 - SolarWinds customers can download purchased software, renew maintenance, & more in our updated Customer Portal (Customer Portal).
 - Community
 - After logging in, community members can rate & review SolarWinds software & participate in forums on thiww.com. on thiww.com.
 - Partner Portal
 - SolarWinds channel partners will find all the resources they need in the Partner Portal, including exclusive partner tools, exclusive partner
- SEARCH
- ONLINE QUOTE
 - BUY ONLINE
 - CUSTOMER PORTAL
 - GOVERNMENT
 - PARTNERS
 - COMPANY
 - CONTACT US
- or
- we can help you find it!
- Solution Finder
 - Products
- Need Help?**
- COMPANY
 - CONTACT US

When the page **loads** it only displays hyperlinks and text.



With graphic heavy content, the page takes a **long time to load**.

CSS ISSUES

POSSIBLE CAUSES

- **Inappropriate CSS reset:** By not doing a proper CSS reset, Web pages are rendered differently, so the layout and format might look different on different computer screens.
- **Color names cause mix-up:** Using color names incorrectly causes a Web page to display text in wrong or different colors.
- **Long CSS code:** Lengthy CSS code will only mean that your website is going to take a longer time to load.
- **Failure of page elements:** Images, graphics, and page layout can sometimes fail to load or takes unacceptable amounts of time to load completely.
- **Failure of text and image style elements:** Failure to set correct parameters for text and image elements in Web pages can cause them to display in smaller fonts and shrunken images.
- **Location-specific issues:** CSS files and its elements look different in depending on physical or geographic location.

```
body, div, h1, h2, h3, h4, h5, h6, p, ul, ol,
dl, dt, dd, img, form, fieldset, blockquote {
    margin: 0; padding: 0; border: 0;
}

body {
    background: #7c7c7c url(images/body-bg.png);
    font-family: Helvetica, Arial, Sans-Serif;
}

#container {
    width: 960px; margin: 0 auto;
    background: #fff;
}

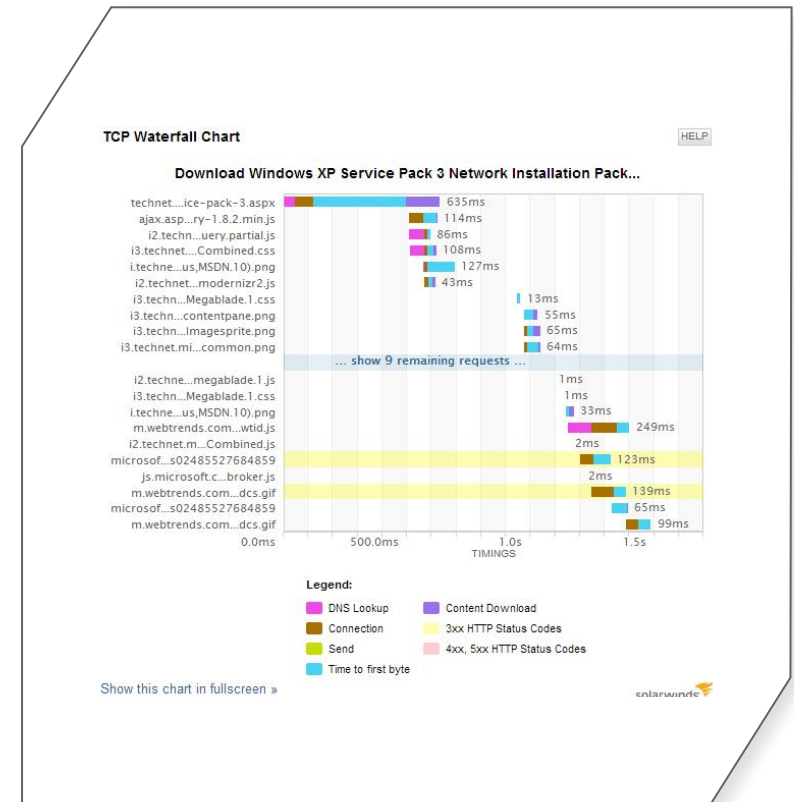
#header {
    height: 170px;
    background: url(images/header.png);
}
#header h1 { text-indent: -9999px; }

#content {
    overflow: auto;
}
#content .sidebar {
```

CSS ISSUES

MONITORING TIPS

- **Establish a baseline for your Web transaction:** This will establish a baseline for how your applications should perform. When pages perform slowly, you will get an alert that there is a problem with the specific page/step of the transaction.
- **Monitor load speeds:** Keep an eye on page load speeds and page elements load times, paying special attention to images, Java Script, CSS files, and .aspx framework.
- **Monitor images:** When recording the transaction, you can monitor for the image match – i.e., whether the image that is played back actually matches the image that you recorded. This will validate whether the page is loading content as intended.



HTML ISSUES

SYMPTOMS & POSSIBLE CAUSES

- **Symptoms:** Page elements are loading slow or not loading at all or the page does not respond quickly to requests.
- **Potential Causes:**
 - **Poorly written queries & memory constraints:** Many times, HTML requests can take longer than usual to process, causing websites to load slowly. This can happen if there are poorly written queries, or if the server does not have enough physical or virtual memory.
 - **Non-compliant HTML Tags:** If there are HTML typos or in cases of non-compliant HTML tags, the webpage would be displayed with errors.
 - **Missing Links to Files & Images:** In many cases, files and images are uploaded but not linked in HTML. As a result, they do not get displayed in the website.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN" "http://www.w3.org/1999/xhtml" xml:lang="en">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
<head>
  <meta http-equiv="content-type"
    content="text/html; charset=ISO-8859-1">
  <meta name="description"
    content="_your description goes here_">
  <meta name="keywords" content="_your, keywords, goes, here_">
  <meta name="author"
    content="_ your name goes here_ / Original design: Andreas">
  <link rel="stylesheet" type="text/css"
    href="andreas03.css">
  <title>andreas03 - Speed and Accessibility</title>
</head>
<body>
<div id="thetop">
  <a id="top"></a>
  <p class="hide">Skip to: <a href="#sitemenu"
    accesskey="2">Site menu</a> | <a
    href="#maincontent" accesskey="3">Main content</a></p>
</div>
<div id="container">
  <p class="hide">Skip to: <a href="#sitemenu"
    accesskey="2">Site menu</a> | <a
    href="#maincontent" accesskey="3">Main content</a></p>
</div>
<div id="container">
  <div id="main">
  <div id="logo">
  <h1><a href="index.html" accesskey="4">your
    site title</a></h1>
  <span id="tagline">Your striking site slogan!</span>
  </div>
```


A horizontal banner with a green background on the left and a white background on the right. The text 'HTML' is in large, bold, white capital letters, and 'MONITORING TIPS' is in smaller, bold, white capital letters below it. On the right side, there are faint, light gray icons of a smartphone and a laptop.

JAVASCRIPT ISSUES

SYMPTOMS & POSSIBLE CAUSES

- **Symptoms:** Websites with videos, or JavaScript menus, or complex features in page may not load or show a warning message that they can't be displayed
- **Potential Causes:**
 - **Server performance:** Momentary server hiccups may result in incomplete code being sent to the browser
 - **Third-party sites:** If you query a third-party site without having it load asynchronously, you will likely have a JavaScript issue on your site
 - **Outdated files:** The browser might be using an outdated version of one or more JavaScript files from its cache
 - **Other issues:** The scripting engine, video card drivers, or Direct X controls could be corrupt or outdated

Guided Tour

Web application performance testing is a must-have in your organization. Whether your Web apps are within your firewall or customer facing, your business depends on fast Website load times. Watch this short video and learn how SolarWinds user

SolarWinds® Web Performance Monitor Guided Tour with Mike Bussey

solarwinds

A Hassle free Configuration Management Software

SolarWinds Network Configuration Manager (NCM) simplifies managing configuration files for your ever-growing list of network devices. NCM lets you centrally manage all of your multi-vendor devices from a single intuitive, point-and-click Web console—no more having to manually Telnet/SSH to each device to make a change or fix an issue.

ENTERPRISE 30-DAY FREE TRIAL

Fully Functional For 30 Days

JAVASCRIPT ISSUES

MONITORING TIPS

- **Test Web pages in the development stage:** When you're building the website, you can monitor the logic of the code by recording transactions that involve JavaScript code and verifying their functionality
- **Monitor for matching images:** If you have JavaScript menus and complex features on the page, you can use text and image matching to simply validate that the page is displayed as you intended.
- **Monitor page load times:** Establish an ideal baseline for how long it should take for your page to load. You'll then receive an alert about the problem when it fails to load according to the baseline.
- **Look at browser compatibility:** Make sure you do QA testing on multiple browsers to ensure JavaScript has the desired effect on all browsers your application supports.



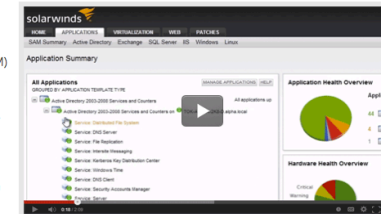
THIRD-PARTY ISSUES

SYMPTOMS & POSSIBLE CAUSES

- **Symptoms:** Page elements are loading slow or not loading at all or the page does not respond quickly to requests.
- **Potential Causes:**
 - **Website plugins:** If there are embedded Flash movies, audio, or video in your Web application, they sometimes won't run correctly without JavaScript.
 - **Content view:** Some webpages use Java applets for interactive content like online games. If the Java plug-in isn't installed, then the browser won't be able to run the applet and interactive content can't load.
 - **Ads:** Live ads in a web page that pull data from a third party site will cause performance issues in websites.
 - **Live content:** Live third-party content like, game scores or a stock ticker, will constantly refresh the page with the latest updates. This can affect other page elements and slow their load times.

Guided Tour

SolarWinds Server & Application Monitor (SAM) provides rich capabilities to monitor and fix your servers and applications, including custom application performance monitoring. Watch this video to learn how to improve the performance of your servers and applications.



Server Monitoring & Application Performance Management Software

SolarWinds delivers agentless application and server monitoring software that provides monitoring, alerting, reporting, and server management. This affordable, easy-to-use server monitoring and application performance management software supports multiple hardware vendors including Dell®, HP®, and IBM System x®, along with the underlying hardware for your VMware® hosts. It only takes minutes to create monitors for custom applications and to deploy new application monitors with Server & Application Monitor's built-in support for more than 150 applications. Server management capabilities allow you to natively start and stop services, reboot servers, and kill rogue processes.

[DOWNLOAD FREE TRIAL](#)

Fully Functional For 30 Days













THIRD-PARTY ISSUES

MONITORING TIPS

- **Track page load time:** Establish a baseline for how long it should ideally take Java or Flash pages to load. If a page loads slowly, or fails to load, you'll receive an alert about the problem in the page.
- **Use image matching:** You can measure how long it takes for third-party content to load using image matching. This will tell you if they've loaded within the specified time. Then you know if the transaction passed or failed.
- **Monitor JavaScript:** You can monitor JavaScript in order for applications like Flash or other embedded videos to run without any issues.


Steps with Problems

[HELP](#)

STEP NAME	TRANSACTION NAME	DURATION
 Download Windows XP Service Pack 3 Network Installation Package for IT Professionals and Developers from Official Microsoft Download Center	 Windows XP SP3 download from Tokyo	n/a
 Java Structure Display, applet	 JCell from Tokyo	n/a
 Enigma Machine Applet	 ENIGMA (Java) from Tokyo	45.81 s
 Microsoft Windows	 Microsoft from Cork	28.17 s
 Microsoft Windows	 Microsoft from Tokyo	28.17 s
 Outlook Web App	 Exchange 2010 OWA Email Test from Cork	11.62 s
 Enigma Machine Applet	 ENIGMA (Java) from Tokyo	45.81 s
 Microsoft Windows	 Microsoft from Cork	28.17 s

Transaction Monitor

Flash from Cork

Transaction status:  Warning

Location:  Cork (Location OK)

Steps with problems:


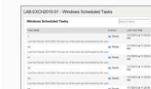
 Flash-Gallery.com - Get your photo gallery (flash component, swf gallery, Joomla and Wordpress plugins, jquery gallery)

IMAGE ISSUES

SYMPTOMS & POSSIBLE CAUSES

- **Symptoms:** Your website loads, but the images and other content may not load leaving a blank area with an incomplete Web page
- **Potential Causes:**
 - **The image loads but it looks incorrect:** Sometimes when images load on a website, they don't look the way they do in other browsers. This could happen if you're using Web accelerator software, which reduces image quality.
 - **Plug-in issues:** Some plug-ins installed in the browser allows images to load only on the very first viewing. They may not load during successive visits to the same page, even after refreshing.
 - **Cache and cookies:** A corrupt cache file or cookies can sometimes prevent images from loading.
 - **Image permissions:** Some browsers prevent certain websites from loading images just to increase load speed.
 - **Internet Security:** Antivirus, firewall, and other security programs may block images and prevent them from loading.
 - **Pathnames to image files:** Images that contain backslashes in their URL might have issues displaying in the browser. This may vary from browser to browser.

Monitor Windows® Scheduled Tasks

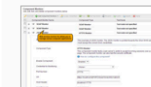


Monitor the state and status of your routine scheduled tasks and get real-time visibility on the completion of all your tasks.

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Web Services Monitor for JSON & SOAP



Gain complete coverage for monitoring composite applications and help customers manage SaaS and other internal applications.

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Windows® Event Log Monitoring



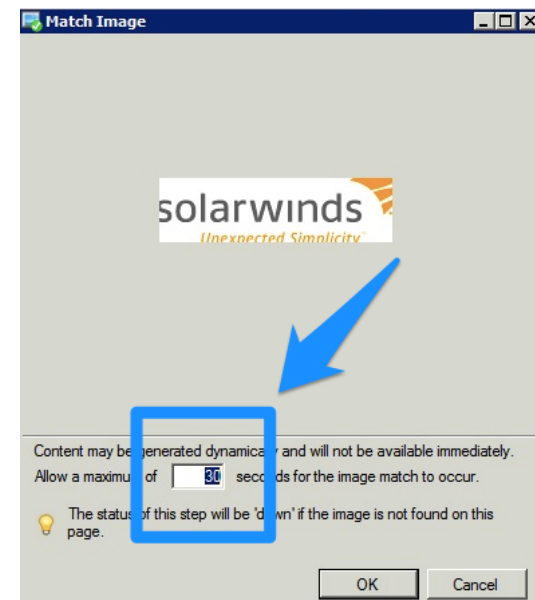
Monitoring Windows event logs helps you determine if there are reliability issues in your environment and provides information on events logged by applications, security events, system failures, and DNS events. The Real Time Event Viewer allows you to view Windows event logs in real time and filter logs by type, event source, and severity.

[Learn More About Event Log Monitor »](#)

IMAGE ISSUES

MONITORING TIPS

- **Use image matching.** You can define the number of seconds it takes for an image to load using image matching. Monitoring this will tell you if the image has loaded within the specified time. Then you know if the transaction passed or failed.
- **Enable JavaScript settings.** Ensure JavaScript is enabled in your browser. Monitoring JavaScript pages will help you ensure the browser displays images and other content on the page as intended.



THE END

Learn how you can monitor internal and external
Web applications from multiple locations with

Web Performance Monitor