GT CONSULT

S EVERYTHING
SHAREPOINT

umlindi
SHAREPOINT PROTECTOR

Contents

Umlindi

Umlindi is the Zulu word for protector. GTconsult have coined their SharePoint management offering Umlindi for this very reason.

A well implemented SharePoint environment becomes an essential business critical tool. Is your environment supported, monitored and proactively maintained? Umlindi provides a remote cloud-based, proactive monitoring and reactive warning system for your SharePoint environment. Our experienced team, and internally developed tools, combine to create the Umlindi offering.

The overall experience of Umlindi is to get an instant view of a SharePoint environment from a visual gauge and being able to drill down into more details at the click of a button. A proactive approach with intelligent reactiveness is the key to Umlindi success.

Umlindi is made up of 3 main elements

Monitoring (Responsive and Proactive)

Proactive monitoring of all system resources and SharePoint parameters is essential to understand what the SharePoint server is doing at all times. This includes the real-time Umlindi Dashboard monitoring as well as the Umlindi Support team maintenance schedule which is done on a monthly basis to update, reboot and clean-up each SharePoint server.

Support

Even with all precautions, issues may occur and Umlindi Support is there to assist 24 hours a day. The Support team can respond to any issues occurring on the SharePoint platform from backup and restore to correlation errors occurring on the site and everything in-between.

Foresight

Using HD Insight from Azure Umlindi will be able to predict system trends and advise on a number of areas

- Do we need more servers to scale
- What is causing spikes in usage
- How can we prevent issues
- How do we prepare for the future

Umlindi Server Side Agent

The Umlindi server side agent is installed onto the SharePoint server and configured to monitor a number of key criteria on the server which compromises of the Umlindi Score.

Umlindi Score

The Umlindi Score is a measure of the health of the SharePoint server much in the same way we as people measure our wellbeing by our body temperature which can be affected by a number of components.
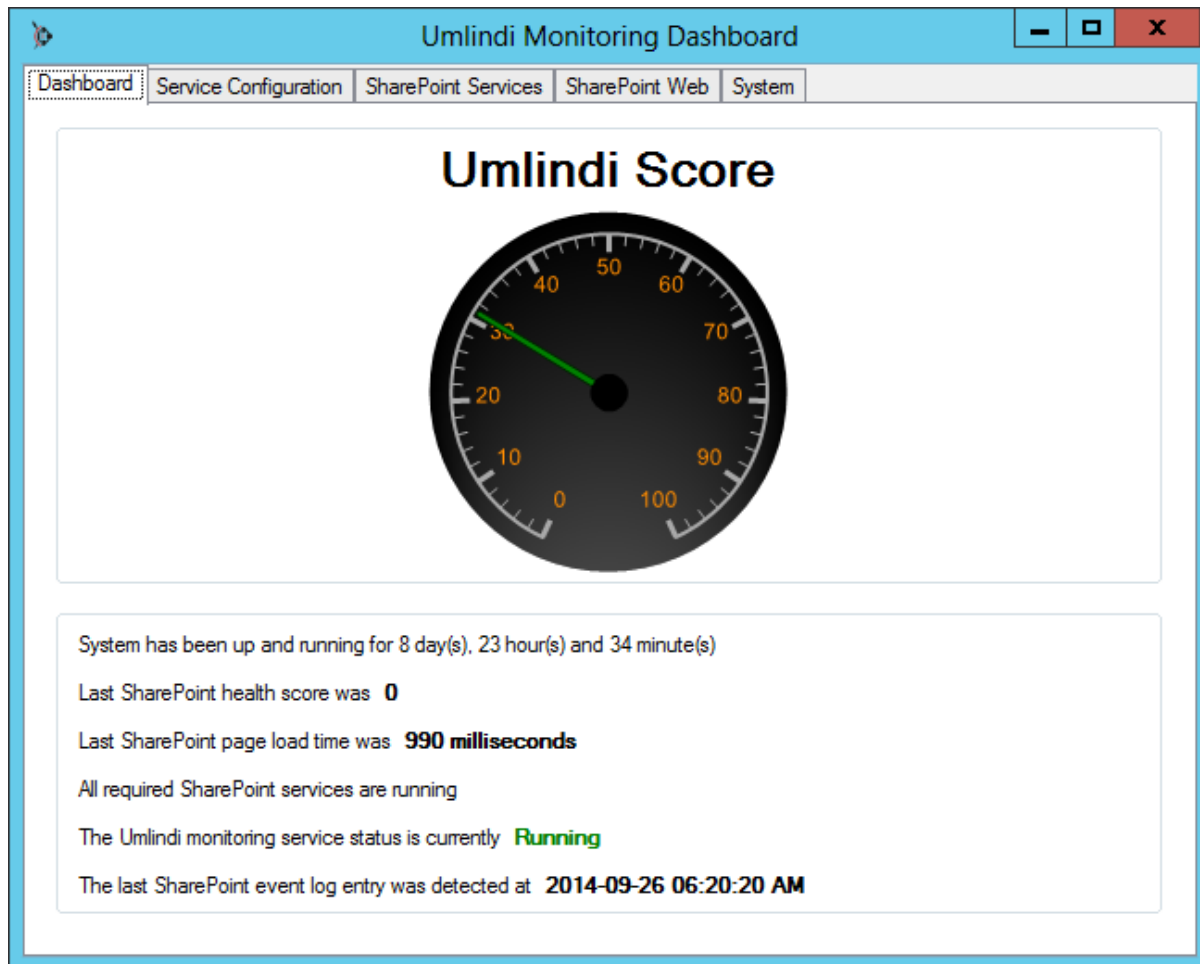

Diagram 1.0 – Umlindi Monitoring Dashboard below 40 (Green)
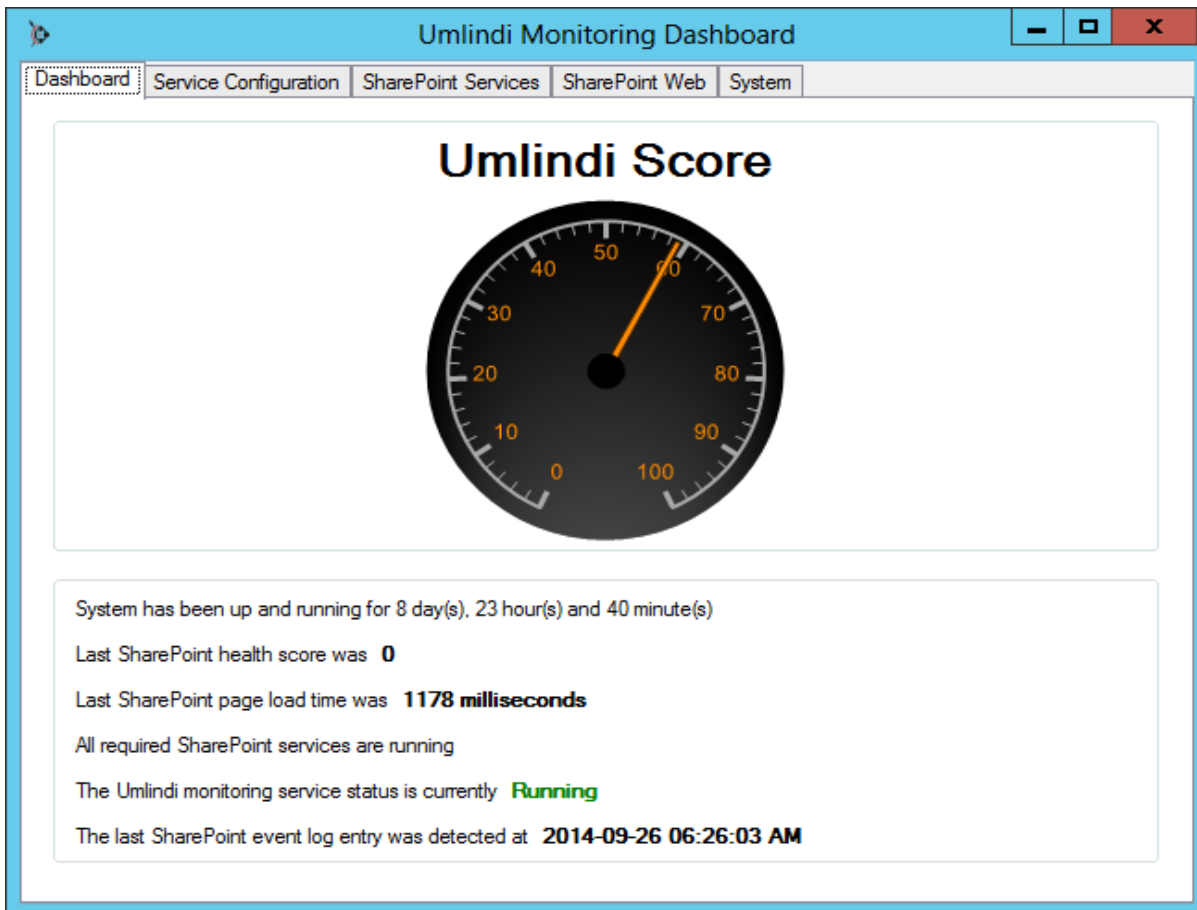
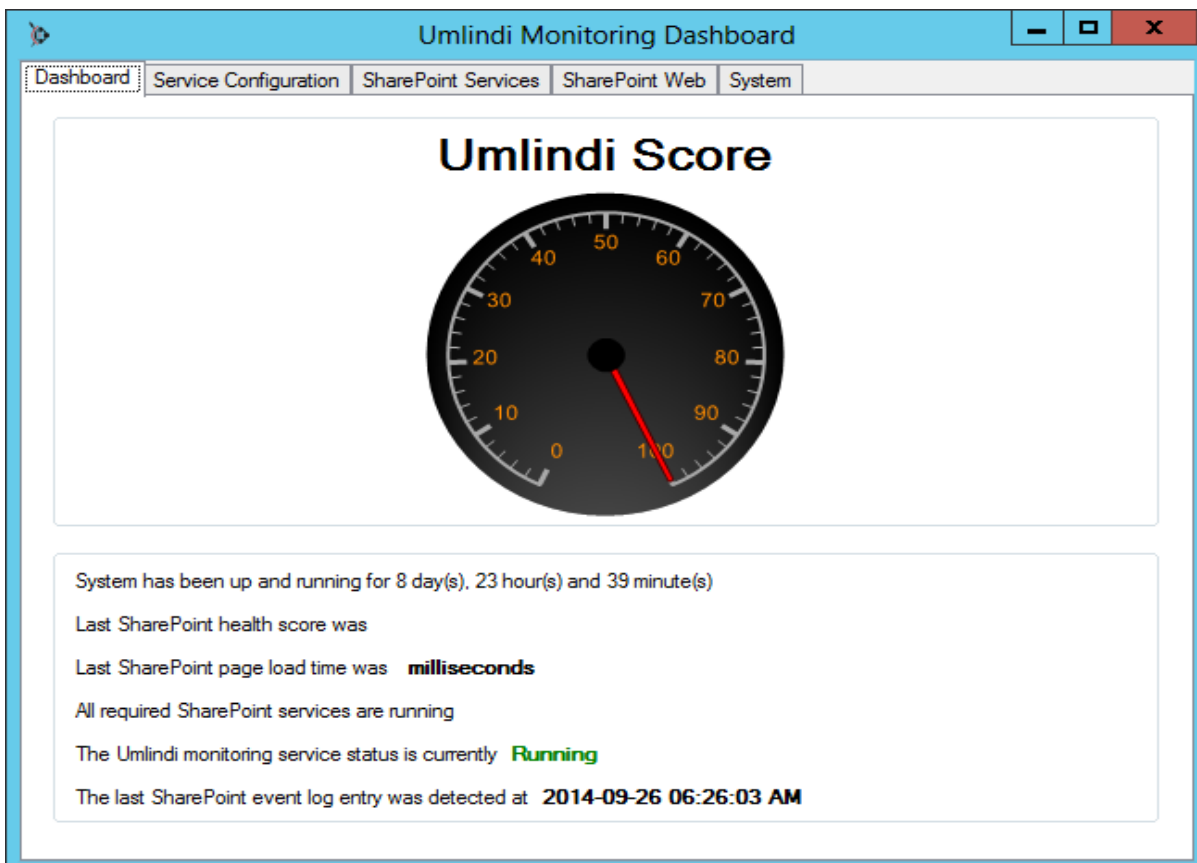Diagram 1.1 – Umlindi Monitoring Dashboard between 40 – 60 (Amber)

Diagram 1.2 – Umlindi Monitoring Dashboard over 60 (Red)

The Umlindi Score (Diagram 1.1 1.2 1.3) represents the SharePoint server health based on the following criteria

Monitored Parameter	Description and weighting
CPU Usage	CPU usage has a total weighting of 20 points between 0-100 and is monitored every 60 seconds to ensure that the SharePoint Server is not being over utilised
Memory Usage	Memory usage has a total weighting of 20 points between 0-100 and is monitored every 60 seconds to ensure that the SharePoint Server has the available resources to be as responsive as possible
Drive space available	Disk space has a total weighting of 10 points between 0 – 15% available and is monitored every 60 seconds to ensure that the SharePoint Server has the capacity to save to local disk
System Uptime	System Uptime has a total weighting of 10 points between 30 and 60 days uptime. This is a reminder to check the server for software updates and install and reboot to keep the system fresh
SharePoint Health Score	SharePoint Health Score has a total weighting of 30 points between 0-3 and is monitored every 60 seconds to ensure that SharePoint can cope with the amount of user requests • Health Score 0 = 0 • Health Score 1 = 10 • Health Score 2 = 20 • Health Score 3 = 30
SharePoint errors	SharePoint errors in the event log has a total weighting of 10 points and is monitored every 60 seconds. This information is critical to the health of the SharePoint server and assist in identifying issues
Page Load Time	SharePoint page load time is the most critical and has a weighting of 60 between 0 – 3 seconds. Page load time is the main facet and is a reflection of a healthy environment. • Between 0 – 1 Second = 0 • Between 1 – 1,5 Seconds = 20 • Between 1,5 and 2 seconds = 40 • Over 2 Seconds = 60 • No response or other errors = 100

One might notice that this does not add up to 100 but goes well over and there is a very good reason for that. In certain situations symptoms may mask each other and only give a total weighting well below the situation at hand. By over compensating some of the parameters the SharePoint Administrator is able to see potential issues quickly and resolve them before they become a problem.

Service Configuration
Diagram 1.3

The service is a critical component of the Umlindi monitoring and is required to be running at all times to send server information to the Umlindi Azure platform.

Service accounts
The service can be configured to run on a number of different service accounts to align with security requirements.

Umlindi Customer ID
This is a unique key to identify each customer

Proxy Configuration

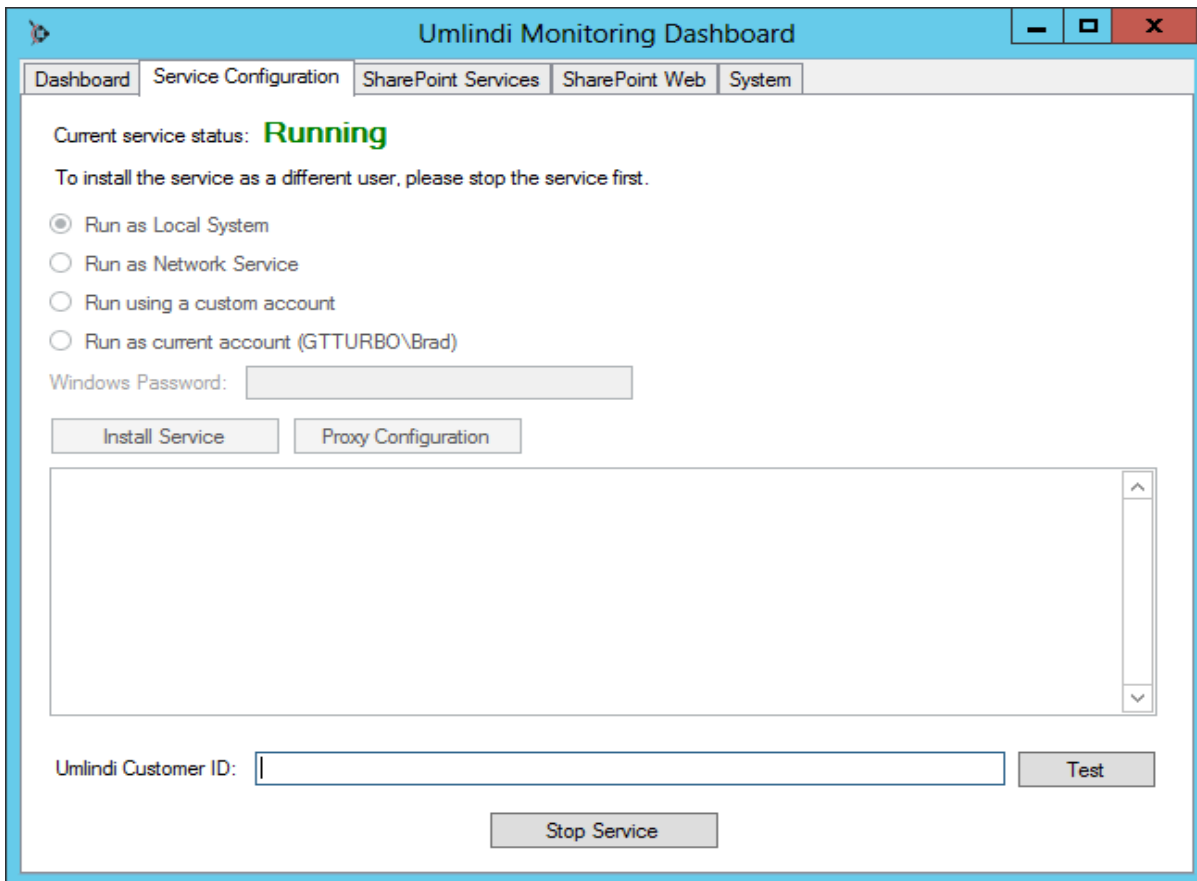A proxy is configurable to comply with specific environments

Diagram 1.3 – Umlindi Monitoring Dashboard Service Configuration

SharePoint Services

Diagram 1.4

A number of key SharePoint services are required to keep the environment up and running correctly. These can be monitored per SharePoint server. Additional services can be added to the monitoring at any time by configuring the services component.

All monitored services will be checked every 60 seconds and if they are stopped this will throw the Umlindi score to 100 and notify the Umlindi team of the issue.

Diagram 1.4 – Umlindi Monitoring Dashboard SharePoint Services

SharePoint Web

Diagram 1.5

 The page load time is a critical component of Umlindi. The page load time is also based on the header reviewed which will include a successful transaction and how long that transaction took which is based on page render time.

This information is the be all and end all fo the Umlindi monitoring. If a system is up and running but the SharePoint site is not available Umlindi page load will change to 100 and notify via alert that the site is down.

Diagram 1.5 – Umlindi Monitoring Dashboard SharePoint Web

System
Diagram 1.6

The system information monitored is fed back to Umlindi for ranking

Diagram 1.6 – Umlindi Monitoring Dashboard System

Umlindi Dashboard

The Umlindi Dashboard is an Azure Web based platform which is accessible anywhere anytime. The site is built on Azure to take advantage of scalability, cloud and performance on demand when needed.

http://umlindi.gtconsult.com

The landing page is a secure client login.

Once logged in the Client name and server info is displayed in real time and automatically refreshed every 60 seconds.

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GTWEBSERVER

2014/09/26 07:20:47	CPU Usage	8%	1
2014/09/26 07:20:47	Memory Usage	82%	16
2014/09/26 07:20:47	Total Memory	16GB	0
2014/09/26 07:20:47	C:\ Free Space	8.88GB	5
2014/09/26 07:20:47	System Up Time	9 day(s), 0 hour(s), 34 minute(s), 14 second(s)	0
2014/09/26 07:20:45	SharePoint Health Score	0	0
2014/09/26 07:20:44	SharePoint Page Load	1003 milliseconds	20

Event Logs (10)

All the information of the server is displayed in real-time.

Umlindi Score and Gauge

This is the exact same gauge as the server component with a 60 second delay

Errors

All event logs are monitored for SharePoint keywords. This is then added to the monitoring and viewable based on the past 24 hours of the server.

Event Logs

2014/09/26 02:00:12	Event Log Keyword #1	2137 - Error from Microsoft-SharePoint Products-SharePoint Foundation; The SharePoint Health Analyzer detected an error. PowerPivot: The Analysis Services OLE DB provider is not installed on this computer. This computer does not have the correct version of the Analysis Services OLE DB provider. To support connections to PowerPivot data from this computer, download and install the SQL Server 2012 version of the provider. Install the SQL Server 2012 version of the Analysis Services OLE DB provider on this computer. For more information about this rule, see http://go.microsoft.com/fwlink/?LinkID=208180
2014/09/26 02:00:02	Event Log Keyword #2	2138 - Warning from Microsoft-SharePoint Products-SharePoint Foundation: The SharePoint Health Analyzer detected a condition requiring your attention. The Unattended Service Account Application ID is not specified or has an invalid value. The Unattended Service Account is a single account that all documents can use to refresh data. It is required when connecting to data sources external to SharePoint, such as SQL. Without a valid Unattended Service Account Application ID, Visio Graphics Services will not be able to refresh Web Drawings that are connected to external data sources. The rule for the Unattended Service Account Application ID failed. The ID does not exist. Visio Graphic Service To resolve this issue, the Visio Graphics Services administrator must provision the Secure Store Service, create a target application, and assign the ID of this target application to this setting. For more information about this rule, see "http://go.microsoft.com/fwlink/?LinkID=142617".
2014/09/26 02:00:02	Event Log Keyword #3	2138 - Warning from Microsoft-SharePoint Products-SharePoint Foundation: The SharePoint Health Analyzer detected a condition requiring your attention. PowerPivot: Secondary Logon service (seclogon) is disabled Secondary Logon service (seclogon) is disabled Enable secondary Logon service (seclogon). For more information about this rule, see http://go.microsoft.com/fwlink/?LinkID=208180
2014/09/26 02:00:01	Event Log Keyword #4	2138 - Warning from Microsoft-SharePoint Products-SharePoint Foundation: The SharePoint Health Analyzer detected a condition requiring your attention. The settings for Word Automation Services are not within the recommended limits. The throughput of Word Automation Services is limited by system resources on the application server. Setting the values specified under Conversion Processes and/or Conversion Throughput too high may degrade the overall health of the application server and negatively impact other services on the machine. Additionally, Word Automation Services may experience decreased throughput and a higher number of conversion failures. Update the Word Automation Services settings to within recommended values. For more information about this rule, see "http://go.microsoft.com/fwlink/?LinkID=179315".

Delayed Server Information

If for whatever reason the information has not been updated within 60 seconds the information will be highlighted in red and a notification sent off to the Umlindi Server Management team or client.

If after 5 minutes no information has been captured for the server the Umlindi score goes to 100 and an alert is sent out

GTWEBSERVER

2014/09/26 08:35:16	CPU Usage	10%	2
2014/09/26 08:35:16	Memory Usage	85%	17
2014/09/26 08:35:16	Total Memory	16GB	0
2014/09/26 08:35:16	C:\ Free Space	9.16GB	5
2014/09/26 08:35:16	System Up Time	9 day(s), 1 hour(s), 48 minute(s), 43 second(s)	0
2014/09/26 08:35:16	SharePoint Health Score		0
2014/09/26 08:35:16	SharePoint Page Load	milliseconds	0

Event Logs (10)

Support

Umlindi has built in helpdesk support which allows clients to log support tickets from the web site. This is then pushed into GTconsult's Umlindi helpdesk and actioned under SLA's

A friendly and knowledgeable SharePoint guru will then be in touch to resolve any issues.

All support calls are logged in a knowledge base and assist with solutions when needed in future usage.
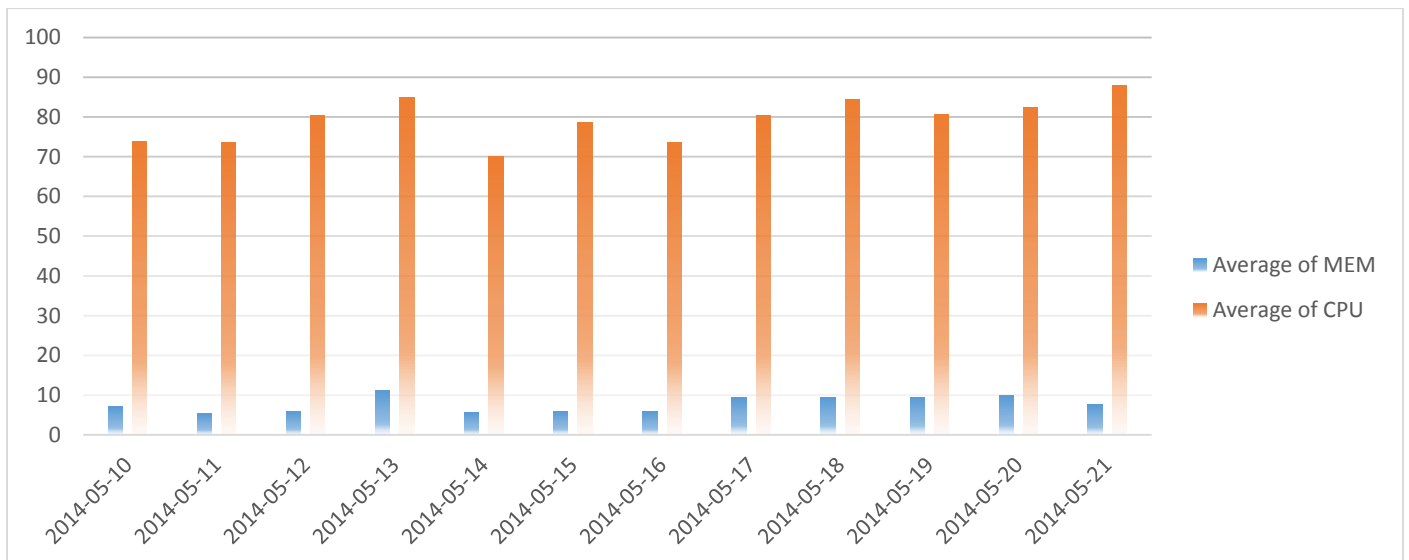
Reports

Currently all reports are exportable to Excel and can be modified with PowerPivot.

Average page load time over a 10 day period
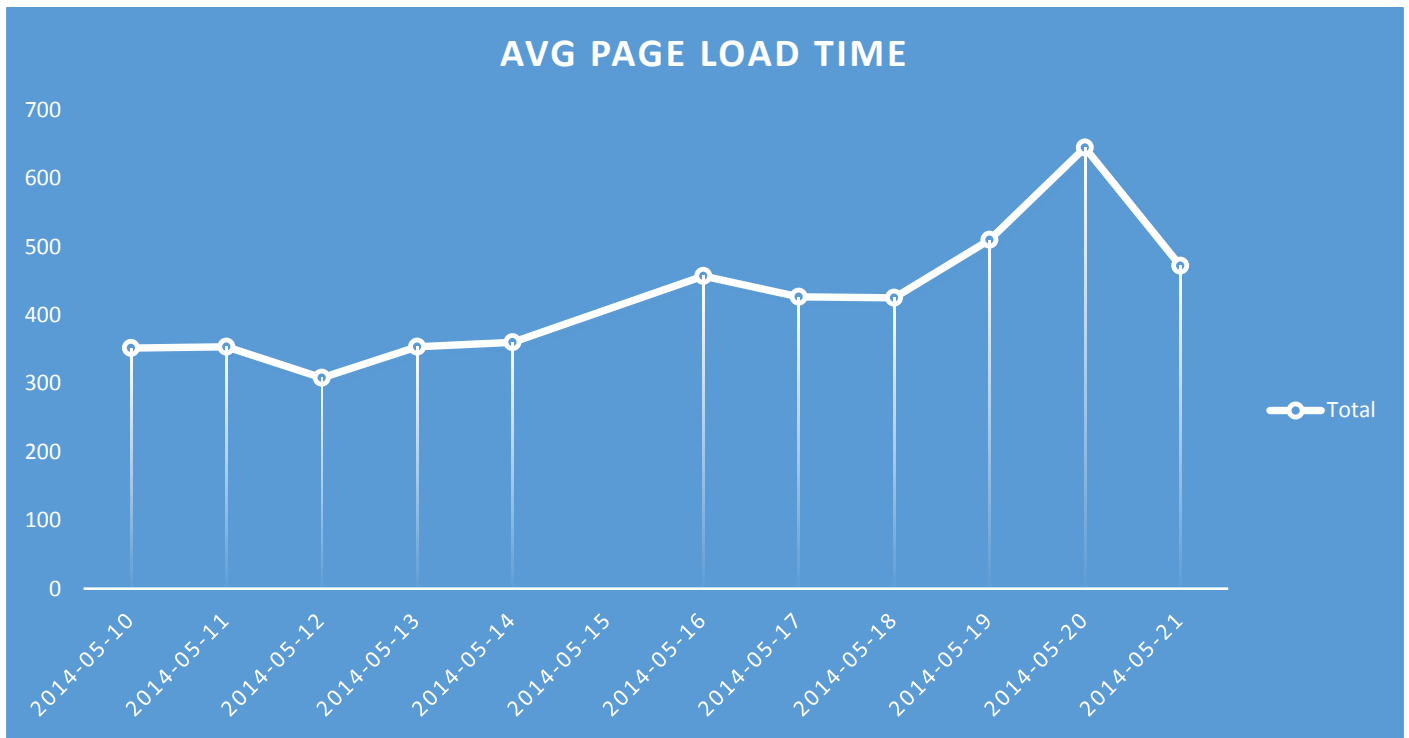
Average CPU and Memory usage over the same 10 day period

This report is extremely useful as it showcases that the issue does not mean the page load time is affected by the SharePoint machine and therefore may be another area such as SQL or Network which may cause the spike in page load time.

The roadmap is to bring these reports on the web based platform utilising HD Insight from Azure to assist in future predictions from trend analysis.