The clock is ticking

preventing downtime
In an age when all companies rely upon IT to be able to perform their standard business function, one of the key responsibilities of an IT Director is to try and prevent IT systems outages. If however these do occur IT Directors must deal with the technical issues as well as the human fallout as swiftly as possible to return the company to a fully operational state in the shortest possible time frame. Whether it’s hardware/software or network failures, power outages or viruses, Content and Code appreciates that an unhealthy proportion of an IT Directors working day can be occupied managing both people and systems back to ‘full health’.

In an industry survey, analyst Gartner took results from 3,300 IT decision makers from 24 countries to predict the average cost of network downtime to be around £4,200 per minute\(^1\), which extrapolates to over £25,000 per hour.

Data loss and downtime cost enterprises around the globe a collective $1.7 trillion in 2014, and UK firms wrote off roughly £10.5 billion\(^2\) according to a recent survey. The same research also revealed that a massive 78% of UK organisations are not confident that they can fully recover after a disruption. This serves as a stark indicator of the toll – in terms of both finance and productivity – that downtime can have on businesses.

System outages and breakdowns can occur anywhere, no matter the size of your company or state of your IT. Issues often stem from application problems or misconfiguration. On 8 July, 2015 the New York Stock Exchange suddenly stopped working. The outage resulted in a suspension of trading which lasted for about four hours, with all trades halted and pending trades cancelled. A statement later released by the NYSE said that the outage was an application issue where “a rollout was released onto computers not loaded with the proper configuration”.\(^3\)

\(^2\) Macrae, Duncan. 2014. Data loss and downtime costs the UK £10.5 billion per year. Online source: http://www.techweekeurope.co.uk/e-innovation/data-loss-downtime-costs-uk-10-5-billion-per-year-156762
\(^3\) New York Stock Exchange resumes trading after nearly 4-hour outage. Online source: http://money.cnn.com/2015/07/08/investing/nyse-suspends-trading/
Is your SharePoint at risk?

SharePoint is one of the world’s leading enterprise IT systems. It is a highly configurable and powerful application that can be used for content and document management, secure data storage, custom web applications, social networking and collaboration. Nevertheless, if misconfigured, it is susceptible to outages.

However, these risks can be minimised by ensuring your SharePoint systems are configured correctly as well as through consistent and thorough monitoring to significantly reduce the likelihood of problems and outages occurring. In this eBook we explore the solution to ensuring your SharePoint IT systems are healthy to avoid the risks of downtime.

The value of a SharePoint Health Check

IT system issues are never completely avoidable, however managed services can help to reduce the likelihood of them occurring by ensuring that your environment is in a healthy state. A SharePoint ‘Health Check’ is a service in which subject matter experts will explore your SharePoint environment, looking for any ‘symptoms’ or signs of an unhealthy system. A Health Check identifies future problems along with recommended remediation activities that provide an opportunity to prevent them and in doing so increases the likelihood of being able to avoid impact to your business.

Content and Code’s managed services experts can perform the Health Check of your SharePoint environment to help protect your business. The following are some of the key components of an effective Health Check:

Platform analysis

A well-designed and implemented SharePoint on-premise solution can be quickly undermined by an inadequate hardware infrastructure. Our team work with yourselves to gain an overall view of how your platform is being used:

- Are the servers fully in line with Microsoft’s requirements and recommendations for the current number of users?
- Are paging files set up correctly?
- If virtualised, are the machines configured to use the best virtual hardware available?
Log analysis

It is not uncommon for recurring error messages to go unnoticed for weeks, or erroneously dismissed as unimportant. We aggregate event log information from all servers in the farm to ensure that every error message is duly acknowledged. By prioritising messages based on their severity and perceived level of impact, we can correlate them with information logs when necessary.

Content and Code can provide clear instructions for fixing underlying issues in the event of a ‘worst case’ scenario.

Performance analysis

By collecting readings from dozens of performance counters on all servers over a period of 24 hours, performance analysis examines your SharePoint instance through the Performance Analysis of Logs (PAL) tool. Helping you detect any inherent performance problems, server or environment issues, performance analysis ensures your SharePoint platform is running as smoothly as possible.

Content and Code’s performance analysis makes sure there’s nothing stopping your SharePoint environment from working as hard as you do.

Data structure analysis

If your content database sizes are approaching Microsoft’s published supportability limits⁴, you may not be 100% sure that all the data inside them is still relevant. It’s a common occurrence in Health Checks for us to uncover thousands of versions of the same documents that did not need to be versioned in the first place, or deposits of large files that have not been touched in years. We help to identify where you can reduce unused or unnecessary content, allowing databases to be trimmed down to far more manageable sizes.

With the same objective in mind, Content and Code offer advice for the re-arranging of your Information Architecture

ROI is achievable by a well-balanced, optimal service topology which follows Microsoft’s guidelines. If we believe the topology of the farm that is being analysed does not match such specifications, opportunities are highlighted in our summary health check report – along with any instances where we think the values for any configuration parameters are not what they should be.

**SQL configuration analysis**

A healthy SQL Server is critical for the well-being of your SharePoint farm – responsible for maintaining optimal performance and security. Core service configuration, data file placement, choice of recovery models and database auto-growth settings are all of primary importance, and as such are meticulously analysed in this step of the Health Check.
Content and Code’s SharePoint Health Check is just one of our managed services that ensures the ongoing health and performance of your SharePoint environment whilst reducing the risk of any downtime.

To find out how we can help you prevent system outages, contact Content and Code’s managed service experts today.

James Nicholson
Managed Services Director
Email: James.Nicholson@contentandcode.com
Telephone: 020 7101 0943

Vincent White
Managed Services Sales Manager
Email: Vincent.White@contentandcode.com
Telephone: 020 7101 0943
Mobile: 07768 690 229