

THE VIEW

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The future of Domino monitoring: Analyze, detect, and prevent

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Managing and monitoring an IBM Lotus Domino environment is more than a full-time job, and administrators often struggle to oversee their entire Domino landscape. Since many network problems are the result of patterns of events over time — as opposed to single, one-time events — it is critical to see status information from both a historical and a current perspective.

To achieve both a summary view and detailed insight into each point in their Domino network, administrators need a simple yet powerful tool.

While Domino natively ships with various tools for monitoring, reporting, and optimizing the network,¹ it does not offer a single point from which administrators can both easily derive the overall network state and dive into the details.

For a management tool to be effective, it should be intuitive and convenient. What the Domino Administrator client, as well as the various Domino configuration databases and documents, lacks is the ability to provide:

- Visibility into server events and statistics on a timeline to discover ongoing problems

¹ Examples of these tools include names.nsf, log.nsf, the Administrator client, performance and health monitoring, Domino Domain Monitoring (DDM), activity trends, Domino statistics (the server console and statrep.nsf), and resource balancing.

- Historical context to make current performance data meaningful
- The ability to monitor multiple servers easily and conveniently

In this article, you'll see how acquiring these capabilities can sharpen your visibility into the Domino environment, and how panagenda greenLight can help you better monitor your environment.

Monitoring should span multiple periods of time

A native monitoring tool within Domino — Domino Domain Monitoring (DDM) — lets you monitor many server statistics, for example, CPU load. The DDM event handler can send you an e-mail notification or log an event in a database should the CPU load ever exceed a configurable number (the default is 90% on Windows and Linux, 97% on all other operating systems). But since the CPU load can often get close to 100% on a Domino server due to short peaks, this single event doesn't tell the whole story.

In order to identify a brewing problem, a monitoring system needs to measure multiple consecutive events over time. The same concept applies to many other server statistics, too. While DDM helps you identify performance peaks, these peaks are not necessarily operational problems you need to address immediately.

The importance of historical context

Most statistics are only useful when rooted in their context. Every analyzed statistic needs to be correlated with at least its historical maximum and average value to provide real understanding and meaning. Knowing that a server is currently serving 500 users is more meaningful when you also know its average and maximum number of users over time — otherwise it is difficult to tell what the current data implicates.

DDM, however, does not analyze statistics in the context of historical averages or maximums (e.g., it won't raise an event if the number of users is greater than the historical maximum number of users), or analyze multiple statistics at the same time (e.g., it won't raise an event if the availability index is lower than 15% and the number of users is higher than 500). Similarly, the Administrator client

Tip!

To maximize real-time monitoring out of the box, enable the Generate Server Health Statistics and Reports preference in the Admin client under File → Preferences → Administration Preferences → Monitoring.

only shows average, minimum, and maximum information during real-time monitoring since it was last initiated. The Administrator client also only displays real-time data for the last 100 polls. Data collected beforehand falls off your screen, and you are not able to retain vital monitoring information.

And while the Administrator client allows you to graphically display just about any combination of statistics — even across multiple servers — they are not normalized on a relative scale in percentages. Rather, they are shown with their respective absolute values, making comparative analysis of statistics within different ranges impossible.

The complexity of monitoring multiple servers

The many different databases, views, and documents in which Domino stores data are so spread out in various places that it requires a great deal of toggling between them to keep a good overview and make comparisons. Did you know that there are at least 42 different areas for administrators to configure and watch?

Often when you need information, at least one of the following is true: 1) you don't know where to find it, 2) you don't know how it can be made available, 3) it hasn't even been collected yet, or 4) it requires a great deal of costly data processing.

Extensively monitoring multiple servers requires the logging of tons of data, which then needs to be screened, processed, and merged — mostly manually — to be meaningful. Therefore, conducting an in-depth analysis of the collected data can be a rather lengthy, complicated, and frustrating process.

How panagenda greenLight can help

panagenda greenLight addresses all of these issues. Because it complements Domino's existing feature set, greenLight greatly eases recurring administrator pain points and reduces both the administration workload and total cost of ownership (TCO) of your Domino investment. Its major features include the following:

- greenLight *Live* displays an overview of all your Domino servers through both interactive tables and topology maps. greenLight makes actual performance data meaningful with the appropriate historical context.
- greenLight can monitor any port on any server and can therefore also monitor, for example, the online and offline states of Web servers, WebSphere Application Server, SAP NetWeaver Application Server, Microsoft Exchange, and print servers, as well as their services.
- greenLight's advanced Domino sensors cover server and cluster availability, network latency, and statistics (e.g., sh sta * and sh config *).
- greenLight *Timeline* gives you visibility into any combination of servers and statistics on a timeline with easy navigation and zoom-in and zoom-out features.
- greenLight *Timeline* also enables you to compare independent time periods by browsing server and statistic sets on two independent timelines.
- greenLight allows you to e-mail reports as PDFs or links to the greenLight browser interface either manually or automatically. You can even assemble reports into service level agreement (SLA) and management dashboards.

Conclusion

Your administrators now have a way to get detailed insight into your Domino environment. panagenda greenLight provides the tools to monitor multiple servers and analyze data within historical context easily.

panagenda greenLight is designed as a virtualized VMWare appliance configured with Linux, Apache Tomcat, and PostgreSQL. This means true plug and play: All greenLight needs is the VMWare player (you can download it for free from <http://vmware.com/download/player>), a workstation or server, a user ID with read access to the Domino servers you want to monitor (no administrator or console access ID needed), and a "start server." From the start server, greenLight begins auto-detecting your entire network, so you're ready to go with almost zero configuration.

Administrators only need a Web browser with Adobe Flash Player 9 to access greenLight from their laptops, desktops, or personal digital assistants.

To see greenLight work its magic in your network, please visit <http://greenlight.panagenda.com> to get your evaluation key along with the greenLight VMWare.

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