

CLUSTERPARK

PRODUCT FEATURES

Operational and centralized investigation of events recorded in log file data with Google-like search queries getting results in a fraction of seconds

Faster, as compared to conventional log data analysis methods, incident identification and resolving, reducing the cost of the consequences as result

Monitoring IT systems and infrastructure conditions in real time using visual analysis tools, dashboards and incident alerts

Control of the entire IT infrastructure from one centralized point of view for administration productivity and efficiency improvement

In-depth understanding of the trends, transactions and system status, identification of patterns and behavior of user activity



Clusterpark GOL is a powerful log data consolidation application, with an open XML standard document database, that provides very fast data analysis. This is very important for fast detection of security breaches, software related troubleshooting, and detection of technical problems in IT infrastructure. GOL can serve as a complementary tool to other IT systems monitoring solutions by providing in-depth understanding of the systems, processes, and quick decision making for preventive activities.

Application architecture

GOL consists of several integrated components:

- golLoader: agent utility for log file entry collection and transmission to a centralized database golDB from hosts in the organization's internal network and the remote departments;
- **goIDB**: consolidated log data entry database, based on Clusterpoint XML document-oriented NoSQL database engine;



- **GOL GUI**: web-oriented graphical interface for access of consolidated in golDB log file entries, event search with regular Google-like queries, the graphs and trend monitoring in real time by using the dashboards and warnings of possible incidents;
- Application interface (API): for connection to golDB from external user systems (like MS Excel for example) with regular XML requests to get the data for creation of statistical reports or deeper analysis of events.

golLoader: log data collection and transmission

On servers or users' PCs installed golLoader agent utility collects log data from the user specified files and sends them to golDB for indexing and consolidation.



Agents provide safe and reliable transmission of data in real time from tens of thousands of different sources. Data to GolDB can be sent within organization's internal network and wide area networks (WAN) as well.

It can be installed on Windows and Linux operating systems in simple and clear to each user way. Further golLoader agent configuration is performed through the centralized GOL graphical user interface.

Log data retrieval takes place at user-specified intervals, taking into account the overall network load. Historical data download also is provided. This is important for the analysis of incidents occurred in the past to detect the signs of them for implementation in further analysis.

golDB: Log Data consolidation and indexing

GOL stores all log records into a single database - golDB that is serviced by Clusterpoint Server software, a general purpose NoSQL document-oriented database management system. golDB database is working as a simple XML document database, where each log record is stored as an XML document. It has very simple and efficient at performance structure, where each tag element is named with a single or two letters only, to save storage space.



GoIDB services as an ONLINE data repository for all log records. It can scale out linearly to hundreds of servers and billions of records, and still deliver Google-like search across all log data content with relevant results provided in seconds. All of your log files can grow for months and even years with seamless database volume scalability in clusters and with virtually no search performance decline. For mission-critical production environments you can easily configure goIDB to run in multiple copies for data security and reliability, with no extra programming.

GoIDB XML database structure is well documented and it can be modified for integration with other enterprise applications.

GoIDB database management is provided by centralized management system (Web-GUI). It allows managing single or clustered databases, user access rights and log files through a single enterprise-grade administration system and one security policy.

gol: graphical user interface

Gol graphical user interface (GUI) provides visual information seeking within consolidated log records, offers navigation tools, highly interactive dashboards and graphs for easy discovery of significant events by evaluation of amounts of collected log records.

Thanks to an innovative approach in information finding Clusterpark GOL can provide incident detection in seconds, rather than minutes or hours. Gol GUI main advantages:

- highly interactive evaluation of log entry amounts for easy discovery of time periods when they are peeking out or diving below normal baseline;
- network graphs for visualization of all log data sources and links between them;
- wide range of possibilities for event search with Googlestyle simple phrase queries, Boolean expressions and faceted datasets;
- dashboards for real-time monitoring of applications and IT infrastructure with search queries and visual graphs;
- automatic alerts with custom search queries and rules for real-time identification of crucial events;
- saving of frequently used search patterns for quick implementation in other search cases;
- centralized management and easy configuration of golLoader agents.



Gol GUI is designed in HTML5, keeping in mind interests of modern tablet and smart-phone users to get information about events and analyze the log data from any place with internet connection.

Application interface: for broader implementation

GOL application interface provides enhanced opportunity for additional program development and creation of reports.



With its help golDB can be integrated with other XML-based data supporting analytical systems. New applications by using .NET, JAVA, PHP, Python, C / C + + languages and more than 40 golDB management commands can be created as well.

GOL installation requirements*		
Resources	Minimum	Recommended
CPU	4 cores	8 cores
RAM	16 Gb	32 Gb
HDD	500 Gb	1,5 Tb
OS golDB	Linux, FreeBSD, MacOS, MS Windows	
OS golLoader	Linux, FreeBSD, MS Windows	

*requirements may vary in accordance with amount of log data to be processed