



GNOWIT VALIDATES THEIR SOFTWARE IN A KUBERNETES ENVIRONMENT

Pronounced as “know it”, Gnowit is a strategic web intelligence software company that provides real-time data intelligence. Gnowit embarked on a CENG Project in order to demonstrate that their software will work in a Kubernetes environment.

SO MUCH DATA, SO LITTLE TIME

Business Intelligence, Market Research, Public Relations, and Government Relations all have one thing in common; the need to stay up to date while faced with overwhelming amounts of potentially new information.

The requirement for comprehensive, evidence-based decision making requires significant effort to be expended in monitoring, analysis, research and report generation. Analysts have to grapple with a never-ending amount of information consuming hours of daily searching through and qualifying internet information sources. During this long process, finding the right information can be difficult due to just how fast it becomes outdated in today's rapidly evolving environment.

Business organizations seeking accurate and real-time research typically end up spending thousands of dollars monthly on services that only deliver results once a week, and that too well after the primary sources have been available for hours or days.

Overall, conducting research is a lengthy, expensive, and time-consuming process delaying critical strategic decision making, and often resulting in a partially accurate picture due to unreliable and outdated sources.

GNOWIT KNOWS ALL

Founded by Shahzad Khan, in Ottawa, Gnowit fulfills the need for fast, accurate and comprehensive briefings through their AI-based software.

Gnowit automatically monitors (in real-time) thousands of web sources, filtering, analyzing and synthesizing the new data into instant briefings. These web sources include news articles, blogs, Twitter, and even House of Commons transcriptions.

Compared to other traditional web scraping/news services, Gnowit uses Natural Language Processing (NLP) to monitor the internet. Using NLP provides users with more complete and context aware data compared to other competitors.

Gnowit's intelligent filters provide key intelligence in many different areas:

- Business and competitor monitoring
Discovering new markets and opportunities through tracking online signals
- Threat detection
- Tracking issues and/or trends that regularly impact an organization (Government or business)
- Policy and news monitoring
- Market Intelligence
- Competitive Intelligence
- Stakeholder and Government relations
- Reputation Management

Saving time on research and analysis is crucial and Gnowit does that well. Users find accurate and intelligent data with Gnowit as soon as it's available, without the fear of missing any relevant information. Gnowit's customers are able to save hours researching information online and can make informed decisions quickly to ensure successful outcomes.

CONTAINERIZATION = GROWTH

Gnowit's software was originally developed for cloud deployment on a monolithic architecture. As demand for the software has increased and the software continues to evolve, Gnowit is looking to make a significant development leap to make their product more scalable in order to serve more customers.

CENG MEMBERS



To deliver at scale, Gnowit planned to pivot their software to a containerized solution deployed with Kubernetes. This would allow the company to monitor and analyze more data sets, and thus scale to a much larger customer base. Additionally, the platform would benefit from the enhanced security and self-healing capabilities enabled by Kubernetes.

Partnering with CENG N, Gnowit wanted to validate and demonstrate that the containerized version of their software is fully functional and is ready for commercial deployment.

PROJECT SETUP

Within the CENG N infrastructure, Gnowit deployed and tested their product using both bare metal and cloud resources in a Kubernetes environment. The master VM was deployed through cloud resources whereas the worker nodes were deployed on bare metals.

During this testing, optimizations were implemented by CENG N to improve the Gnowit platform. Scale testing was also completed for certain Kubernetes microservices as they were being deployed.

POSITIVE RESULTS

Through this CENG N project, Gnowit has validated and demonstrated that the web intelligence software functions properly within a Kubernetes environment.

The testing was a complete success, with all test cases proven out. Gnowit has successfully migrated from their legacy architecture to the new containerized system in preparation for their 2020 growth goals.

LEAVING WITH MORE THAN EXPECTED

After completing their project with CENG N, Gnowit leaves with more than just a containerized web intelligence service. By successfully switching from a monolithic to containerized architecture:

- Costs for hardware requirements decreased by 45%
- Auto-scale policies for resource allocation were developed based on monitoring and customer requirement
- The Gnowit platform now has the capability to deploy in any cloud or cluster
- Kubernetes was able to provide better security to the Gnowit software

GNOWIT MOVES FORWARD

Now placed within a Kubernetes containerized architecture, Gnowit is able focus on their main objective of acquiring a larger customer base and having their platform capture more data, benefit from greater customer traction, and deliver many more reports.

CENG N is happy to have helped Gnowit continue its journey to help new businesses and government sectors alike with their research over the internet providing much more efficient and accurate data.

