The roles discovery and CMDB play in Al success

How quality data from IT discovery and configuration management is critical for GenAI solutions



Benefits

- Increase prescriptive performance, reliability, and security through a deeper knowledge of the IT environment
- Accurate data allows GenAl to help resolve service issues faster
- Promote faster troubleshooting and response through GenAl summaries of complex configuration data
- Improve configuration management data quality and efficiency through anomaly detection and resolution suggestions

Organizations are turning to GenAl to improve the operation of IT systems, which can help with everything from increasing reliability and security to enhancing data governance.

To take advantage of this, it is critical to have a complete and accurate understanding of technology systems. This highlights the central role of the discovery and configuration management database (CMDB) solutions that help organizations map and manage their IT environments—and which are also being transformed with GenAI.

Where discovery and CMDB intersect with GenAI

The role of IT discovery and CMDB solutions is to collect, reconcile, manage, and present configuration data about the hardware, software, applications, and services used within an IT system and their interdependencies across environments.

It is vital for organizations to hold this knowledge as they rely more and more on digital systems and computing technology, including generative and other forms of Al.

It is essential that the configuration items (CIs) are accurate and complete. It is also essential that they are readily accessible to other solutions and teams, particularly those involved in service management, security, and software development.

And while many of those solutions are being supercharged with AI, it is critical that the results they deliver are based on sound information to begin with.

The possibilities presented by AI

Organizations with an accurate understanding of their environments are well positioned to capitalize on a range of new IT asset configuration and management use cases that are being unlocked by AI and GenAI solutions. These include:

- Improved discovery: Al-powered tools can automatically discover and identify CIs across the IT environment, including cloud resources, virtual machines, and network devices. This reduces the manual effort required to maintain an accurate and up-to-date CMDB.
- Anomaly detection and reconciliation: Al models can analyze CMDB data and compare it with a live IT environment to identify discrepancies and anomalies. This enables the reconciliation of differences between the CMDB and live environment, improving data accuracy.
- **Configuration knowledge:** GenAl can assist in automatically documenting CI attributes, configurations, and relationships. It can also summarize complex CI information to help teams understand system components and dependencies quickly for faster troubleshooting and resolutions.
- Improved resilience: GenAl can assist in processing and analyzing large amounts of Cl data to identify patterns and predict potential issues.

Al can also be used to analyze the potential impact of failures, support predictive maintenance, and optimize software licenses. With the breakthrough of generative AI, these processes can increasingly be managed by using natural language. Taken together, these capabilities promise to help organizations make their environments more robust and support faster troubleshooting and resolution when issues do arise.

The result is a snowball effect, where a comprehensive and accurate discovery and CMDB solution, itself made more powerful through the use of AI, enables an enterprise to run a more reliable, secure, and adaptive IT infrastructure. In turn, that IT infrastructure can better support AI deployments across the business that unlock productivity, improve cyber-resilience, transform customer communications, open new business models, and more.

Customers, partners, employees

GenAl-powered business app: E.g. a chatbot

GenAl-powered app: E.g. staff intranet GenAl-powered app: E.g. sales analysis GenAl-powered app: E.g. inter-office translation GenAl-powered app: E.g. invoice processing

ITSM, DevOps, SecOps, and other IT operations (some augmented with GenAl)

Discovery and CMDB (with accurate CIs)

IT infrastructure

Figure 1. Accurate, comprehensive discovery and configuration data as the foundation for a robust IT environment that can support Al-powered business applications.

How to optimize discovery and CMDB for AI success

When considering AI solutions for your organization, the large language models (LLMs) used to support generative AI functionality need to be evaluated. This should include reviewing whether the LLM is generic or has been tailored to IT service management tasks. It should also cover whether the LLM is public or proprietary, such that it can be hosted on-premises for greater security. Your organization may be under regulatory restrictions that could determine what LLM can be used, what data the LLM can have access to, as well as the deployment model for your GenAI solution.

In order to have discovery and configuration management be a foundation of Al success, the following steps should be taken to ensure better outcomes:

- 1. **Implement effective discovery and CMDB:** Ensure any discovery and CMDB solution provides a comprehensive and continuously up-to-date view of the IT environment.
- Check CMDB data quality: Check that the data held in the CMDB is accurate, noting that GenAI systems cannot evaluate whether the information they use is correct.
- 3. Connect to GenAI: Make sure the CIs, change logs, service maps, and other data within the CMDB are made available to relevant GenAI solutions.
- 4. Understand the IT underpinning GenAl solutions: As GenAl solutions are adopted, build maps of the components used to deliver those services to build a strong understanding of how Al systems operate.



How GenAl could use configuration data

Figure 2. GenAl can help improve both configuration management processes and data.

Resources

Learn more about OpenText Universal Discovery and CMDB, and the role GenAl can play in improving IT operations >

OpenText Universal Discovery and CMDB

OpenText[™] Universal Discovery and CMDB is a vendor-neutral configuration management solution that is deployed as SaaS, onpremises, or in the cloud. Incorporating growing Al functionality, OpenText Universal Discovery and CMDB snaps IT landscapes into sharp focus, empowering organizations to increase performance, security, and compliance.

OpenText Universal Discovery and CMDB complements OpenText Aviator—a family of practical and trusted generative AI capabilities within OpenText's cloud solutions for IT operations, content, experience, business network, developer operations, and cybersecurity.

