

Sweagle Configuration Data Management

The Configuration Data Management Challenge

Every organization is looking for ways to improve quality and productivity of DevOps teams through automation.

Enterprise applications are continually changing, with greater frequency and cadence than ever before. Teams are working with a more dynamic infrastructure and environment landscape including Platform-as-a-Service (PaaS) or Infrastructure-as-a-Service (IaaS) and with more complex applications ranging from micro services powered to cloud native. In addition, teams are required to get things right the first time and deliver to a high standard.

Currently, most organizations manage configuration data in a highly fragmented way and rely on application and environment experts to manually prepare, maintain and validate configuration settings. Not only do these manual efforts foster a "hidden" cost, they are also a bottleneck for increasing number of automated processes along the continuous delivery chain. Far too often, release deployments and configuration changes fail to work the first time, requiring time consuming and expensive resources to trouble shoot, rework and recover.

The Sweagle solution

Sweagle's technology allows developers and operation teams to track configuration changes and identify & prevent potential configuration-related issues before new code is deployed. Sweagle helps reduce the cost of configuration data management and increase the reliability and quality of enterprise applications along the continuous delivery pipeline.

The solution stores configuration data keys and their values for infrastructure, environments, releases and applications, and applies a configurable data model in which each key value pairs are put into context. The result is configuration data becomes more structured, which provides reusability, hierarchies with inheritance, identification of duplicates and alerts for conflicting settings.

Sweagle can discover missing or invalid data and can query it and create insights and analytics. Sweagle tracks all changes under full version control and creates automated "snapshots" of the exact set of configuration data at any moment in time for full auditability. Snapshots can be made ahead of time to help prepare all required configuration data for a deployment, or a previous snapshot can be reactivated whenever needed.

IT operations teams can ensure more resilient services with change and configuration data provided by Sweagle. If an issue does occur, Sweagle helps teams pinpoint bad configurations related to an issue and correct the issue to mitigate risk of any downtime or security items. Sweagle allows you to adopt a corrective approach and will identify granular change in data in order to fix incidents & errors.

Manage

How configuration data is managed in an organization matters. Sweagle provides for easy management of configuration data by providing a full consolidated picture of all the configuration data that is used at any given moment in time for any given application, app versions and in any given environment. Sweagle applies a configurable "metadata model" in which key value pairs are put into a context so they become "structured" data. This enables reusability, hierarchies with inheritance, identification of duplicates and alerts for conflicting settings.

Secure

Sweagle provides enterprise grade security with configurable access policies by path or by type of data. Not just for users and user groups accessing configuration data through the web interface, but also for system and API access. API's are treated with as much security and access control as needed. Customers can enforce role based access on configuration data between teams. Sweagle collects and consolidates configuration data from various sources and automatically pinpoints any of the config data sources that contain unencrypted sensitive data.

Validate

Sweagle helps teams define advanced logic validation rules. Sweagle will continuously monitor incoming data changes and apply all validation rules and prevent broken configuration data settings being consumed by other tools along the continuous delivery tool chain.

Graph Data Model

The hub of configuration data management. Apply better, cross organization standards through a customizable data model. Simplify data into a human readable format that deduplicates, structures and applies rules and logic to data to ensure no updates are ever missed.

Data Validation

Avoid costly mistakes by adopting a data validation strategy that prevents poor data changes making it into production environments.

Data validation catches mistakes ahead of deployment as part of automated policies and routines. An extensible library of rules checks every new, modified or deleted set of data and where rules are broken teams are immediately alerted, builds or automation routines are blocked and errors are stopped pre-deployment.

This directly impacts team standards and automates quality without impacting teams daily working.

Audit, History and Comparisons

Sweagle tracks, audits and stores all data changes through config data's lifecycle. It's a passive store and requires tools to inject data into Sweagle as part of automation routines, CI/CD pipelines, infra-as-code, manual processes or API calls. This gives tremendous flexibility in terms of integration points and data collection points to track all different manners and states of config.

Any two versions can be compared and Sweagle will return the accumulated difference. Teams can compare the config data settings between two different sets of data, and can compare application

configuration settings between insights such as user acceptance testing and production instances. Teams have visibility into the number of changes, analyze the differences, and filter on information.

API Architecture

Sweagle's API driven architecture provides a large amount of integration points and automation potential.

A modern, robust API approach to fundamental sync with any technology or methodology.

Integrate seamlessly with CI/CD pipelines, infrastructure-as-code tooling and automation frameworks with ease.

Export & Deploy

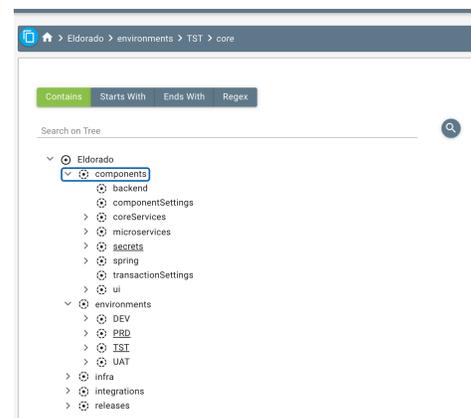
Consolidating data gives teams power and flexibility to consume data in multiple formats.

Sweagle export engine can customize export file types, requirements and 'when' to deploy resulting in configuration data that is tracked, validated, secured and delivered on time.

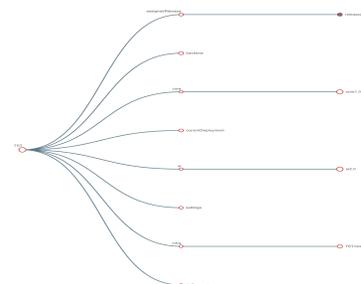
Role based access

Secure data access policies with simple but granular rules to secure sensitive data and share across teams. Remain confident in the knowledge that it is not being used by the wrong people.

Model your data in a structured consolidated view



Map app to env to infra dependencies across your technology estate.



Prevent errors in production with extensible library of validators

Stored Status	Pending Status

