Getting Started with Kiuwan

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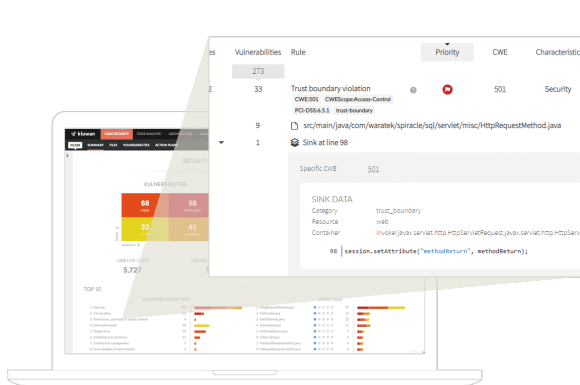
Kiuwan is a cloud-based solution platform for Application Security and Enterprise Software Analytics.

Kiuwan solutions help teams of all sizes meet their objectives:

- Detect **security vulnerabilities** as early as possible in the development life cycle
- **Reduce issues** —bugs— in the technical aspects of applications: performance, efficiency, etc.
- **Manage costs** associated with development and maintenance, from internal or external resources
- Align developed applications with **business goals** and missions
- Increase team **productivity**
- Gain greater control —**governance**— of application development or maintenance outsourcing.

Kiuwan gathers evidence from an application's source code using **Kiuwan static analyzers,** which support more than 30 different technologies.

How Kiuwan works

Kiuwan calculates and presents relevant **Software Analytics metrics** to help stakeholders make informed decisions and continuously improve the software and SDLC processes.

- Source code static analysis, either locally through a downloadable agent or in the cloud, uploading the code to Kiuwan site
- In-depth detection of **security vulnerabilities**, providing detailed reports on where the vulnerabilities appear, their correlation to security standards, providing remediation clues and assessing remediation progress.
- **Quality defects** detection that affects important software characteristics: reliability, efficiency, maintainability, and portability
- Calculation of **software metrics** —number of violations, complexity, design, code size.
- Detection of **duplicate code**.
- Calculation of **global software Indicators**, necessary for the governance and management of the software applications portfolio, including risk associated with the structural security and quality of the code, global Indicator and software characteristics indicators, effort to target, and technical debt.

All results are available in your Kiuwan account through **dashboards** (with powerful filters, aggregated and historical views, etc)

You can also extract results to consume elsewhere through Kiuwan's **REST API**.

Reports generation at all levels and in different formats (PDF, CSV, etc.), with the ability to create **custom reports** with a custom level of details depending on your specific needs

A complete set of **tools** to **fully customize Kiuwan to your needs:**

- Create and manage different software **models** to analyze your applications.
- Generate and track **action plans** automatically.
- **Mute defects** when needed and re-calculate analytics on the fly.
- Create and manage different **audits** and apply them automatically to all deliveries in your application life cycle.
- Group your applications in **portfolios** to give you relevant perspectives of your Software Analytics.
- Generate **rankings** by perspective.
- Cross different perspectives for several metrics and indicators to answer important questions about your application portfolio.
- Etc.
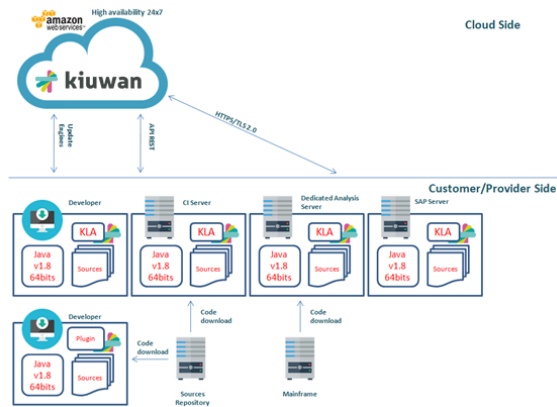
How do I start using Kiuwan?

> If you do not have a Kiuwan account yet, request a demo from our sales team here.
>
> If you already have an account, visit our User Guide or see below:

In short:

Once you have a Kiuwan account, you have access to the Kiuwan collaborative environment in the cloud, and you can start analyzing your applications to generate the Software Analytics for your application portfolio.

Below is an outline of the basic steps to analyze your application:

1. **Create your first application**.

2. **Decide how to analyze the code**
    a. **Locally**, by downloading and installing the Kiuwan Local Analyzer on a local machine and sends the results to the server; or
    b. **In the cloud**, uploading the code of your application.

3. **Analyze** your application
    a. Do not worry if there is a code of different technologies and languages, Kiuwan knows how to distinguish them.
    b. If you choose to analyze in the Kiuwan cloud, Kiuwan deletes the uploaded code to safeguard your privacy once the analysis is finished

4. **Work with the results** in one of these ways:
    a. Use the Kiuwan **Dashboards**;
    b. Generate **PDF reports**, either at an executive or detail level;
    c. Export the result data in **Excel** format; or
    d. Use the **REST API** to extract relevant information.

5. **Iterate and refine**
    a. With the results and the list of recommendations, your development team will likely want to review and fix the code and analyze it again, to verify whether they have achieved the desired goals.
    b. As a result, you can see the evolution over time of your application's Software Analytics. This allows you to refine the Kiuwan default Software Model to your specific needs.

6. **Manage and govern**
    a. Kiuwan Governance allows you to **group your applications** in "portfolios" or logical groups, to obtain global indicators for the criteria you need — technology, suppliers, functional units, etc. — to analyze their **evolution** in time or compare its results.

7. **Integrate the analysis in your Software Development Life Cycle**
    a. To implement **continuous analysis** within other SDLC continuous processes (integration, deployment).
    - You can **automate Kiuwan analyses** for your application or deliveries of change requests during maintenance if you include Kiuwan Life Cycle functionality.

Kiuwan Analysis Options
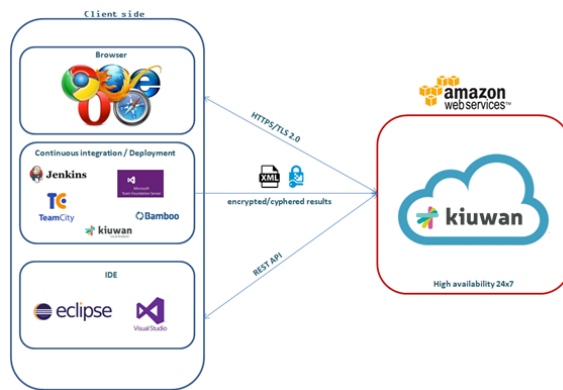
Kiuwan Local Analyzer

Kiuwan Local Analyzer (KLA) is the distributed analysis engine that allows you to **execute Kiuwan analyses locally**.

With Kiuwan Local Analyzer, you can perform analyses **without the source code leaving your premises**.

It **analyzes the source code** and **uploads (encrypted and through HTTPS) the results** to Kiuwan.

Kiuwan Cloud Analyzer

You also have the option of **uploading your source code (encrypted and through HTTPS) to the cloud and analyzing it there**.

The results will show in Kiuwan, just like the KLA.

Kiuwan On-Premises

Kiuwan On-Premises is the on-premises version of Kiuwan SaaS, providing **full Kiuwan functionalities but completely deployed on your own premises**.

It is an alternative to the cloud solution for those customers who prefer to maintain a private instance completely managed within their own infrastructure.

Kiuwan On-Premises can be installed on a single host or on multiple hosts (externalizing one, some or all of the provided infrastructure services).

Developers - Integrations

Kiuwan can integrate with the most popular IDEs and CI environments.

Kiuwan Modules
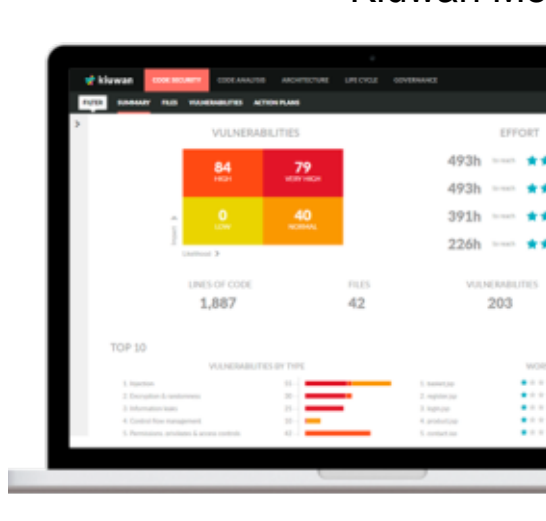
Kiuwan Code Security

Kiuwan Code Security enforces a rigorous approach in the **detection of security vulnerabilities**.

We strive to meet the most stringent requirements and our compliance reports support well-known market standards (OWASP, CWE, MISRA, NIST, PCI, and CERT among others). Integrate Kiuwan Code Security in your development process and increase the overall security of your applications while reducing risk and cost thanks to early detection and correction of newly introduced vulnerabilities. Your developers and security managers will have at their fingertips details of security vulnerabilities and remediation progress.
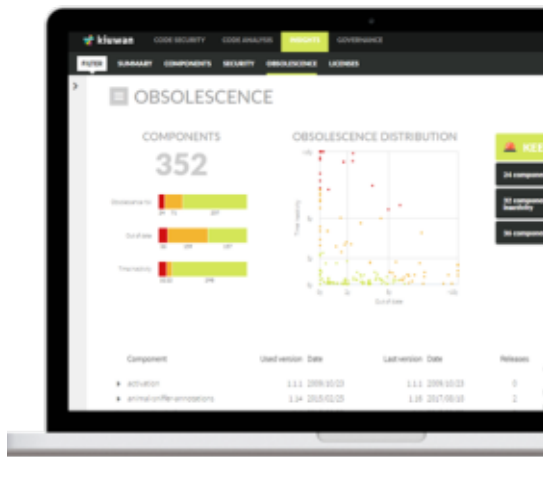
Kiuwan Insights

With Kiuwan Insights, you can identify and manage v ulnerabilities, compliance, and operational risk that may arise from using open source components.

Open source components are a significant and important part of commercial software today.

Yet the use of these components introduces the risk of security vulnerabilities, as well as a need to ensure proper licensing and adherence to policies.

Kiuwan Code Analysis

Kiuwan Code Analysis offers unparalleled scope in the **detectio n of quality defects**, smoothly integrating within continuous development processes.

Identify code defects and manage your remediation effort with blazingly fast speed in a collaborative and decentralized environment. Your developers and project managers will have all the information they need to continuously improve applications

Kiuwan Governance

Kiuwan Governance helps you to make informed decisions based on the objective information gathered by Code Security and Code Analysis.

Group your applications in portfolios that are meaningful for your business and consume aggregated information by the perspectives they provide.

Manage the different types of risk you face in the different perspectives, create rankings to prioritize efforts, and much more. Help decision-makers focus on that, make decisions, without the complicated technical details.

Kiuwan Life Cycle

Kiuwan Life Cycle helps you sensibly reduce development time, testing, and integration effort during your software development life cycle by establishing **baselines** and analyzing **deliveries** and **change requests.** This empowers you to define and apply **automatic audits** to make sure each delivery meets your goals without introducing regressions.