

Perforce Software, Inc.

Statement of Work for Klocwork Static Code Analysis Audit – One (1) to five (5) million lines of code (MLOC)

Version 1.0 (March 2021)

This Statement of Work (“SOW”) is between Rogue Wave Software, a Perforce company, a corporation with its principal place of business located at 400 First Avenue North, #400, Minneapolis, MN 55401 (“Rogue Wave”) and the client named on the quote that references this SOW (“Client”). This SOW authorizes Rogue Wave to provide the services as described below.

1. Scope

This statement of work (“SOW”) concerns a service that consists of the delivery of Klocwork Static Code Analysis Audit – **one (1) to five (5) million lines of code (MLOC)** by Rogue Wave Software, Inc. (“Rogue Wave”) to the client named on the quote that references this SOW (“Client”). The Klocwork Static Code Analysis Audit service is designed to help the Client assess the code quality of, and security vulnerabilities in, their C/C++, Java, or C# source code .

Service Objectives are to provide a snapshot of code readiness by:

1. Using Klocwork to monitor the application’s build process and analyze the source code
2. Reporting on code metrics such as:
 - Summary metrics: number of files, lines of code, error density (number of issues per kloc),
 - Distribution of issues by issue type,
 - Issue distribution by component,
 - Most frequently occurring issues,
 - Code complexity metrics (McCabe Cyclomatic complexity),
 - Number of and names of third party components (via manual inspection), and
 - Basic COCOMO analysis.

1.1 Assumptions and Pre-Requisites:

1. Client environment will be running a supported system
 - a. System requirements can be found at:
<https://docs.roguewave.com/en/klocwork/current/systemrequirements>
2. Client has reviewed and accepted this Statement of Work
3. Client has selected, as stated in the quote that refers to this SOW, a service tier level that identifies the extent of the engagement (see 1.2 Delivery Activities):

- 1-5 MLOC (one (1) to five (5) million lines of non-blank non-comment lines of code)
4. Client will provide the platform and hardware support required
 5. Client makes their development environment available to Rogue Wave through an onsite visit, VM image, screen sharing, etc. whereby the application to be analyzed can be successfully built. Klocwork tools will be installed in the development environment.
 6. Client has identified a project manager and sponsor to work jointly with the Consultant to plan activities and ensure that required Client resources are available as needed.
 7. Client's project development team is available and completely dedicated during the scheduled time of onsite or remote delivery.

1.2 Delivery Activities

The extent of the delivery activities is limited by the number of non-blank non-comment lines of code identified in the quote. The delivery activities will be applied up to the identified number of non-blank non-comment lines of code.

Service Task	Resources	Deliverables/ Agenda
Delivery Preparation (1-2 weeks before delivery)		
Remote over WebEx or similar	Consultant Client project lead	<ul style="list-style-type: none"> • Kickoff meeting <ul style="list-style-type: none"> • Discuss service details with Client, review engagement objectives, gather information required to develop a delivery schedule. • Identify which industry standards, supported by Klocwork, will be applied to the application. • Develop detailed schedule.
Capturing raw analysis data		
Remote over WebEx or similar or onsite	Consultant Project lead/build engineer	<ul style="list-style-type: none"> • Monitoring of build and capturing raw data <ul style="list-style-type: none"> • Install Klocwork tools in the development environment, monitor the application's build command, and perform the Klocwork analysis. • Initial review of analysis results to identify tuning opportunities • Consultant captures raw analysis data and source code for post-analysis review.
Post analysis		

Service Task	Resources	Deliverables/ Agenda
At Rogue Wave office	Consultant	<ul style="list-style-type: none"> • Consultant reviews analysis results and prepares PowerPoint report
Report Presentation		
Remote over WebEx or similar	Consultant Client project lead	<ul style="list-style-type: none"> • Consultant presents draft report to Client • Consultant and Client review report
Remote over WebEx or similar	Consultant Client's project lead	<ul style="list-style-type: none"> • Consultant delivers final report

1.3 Exclusions/Add-ons

The following items are not in scope for this delivery:

- Analysis of more than one application
- Larger applications (more lines of code)
- Detailed list of detected defects (summary statics are provided).
- Analysis of defects to identify False Positives after tuning

If additional analysis depth or breadth is desired then a new SOW, to describe the engagement, can be written and quoted.

2. Deliverables

The deliverable of the Static Code Analysis Audit is a PowerPoint deck containing a conclusion and supporting metrics.

Typical metrics (for C/C++, Java, and C#) include:

- Summary metrics:
 - Number of files, Lines of code, Error density (# of issues per kloc), ...
- Distribution of issues by issue type
- Issue distribution by component
- Most frequently occurring issues
- Code complexity metrics (McCabe Cyclomatic complexity)
- Number of and names of 3rd party components (via manual inspection)
- Basic COCOMO Analysis

3. Roles, Responsibilities and Expectations

In order to successfully complete the project, it is important that roles and expectations are clear to both Client and Rogue Wave staff. These expectations are outlined below. Where appropriate, a single individual may fill several of the roles listed below. Rogue Wave reserves the right to use subcontractors in those roles it deems appropriate. Use of any subcontractor does not relieve Rogue Wave of any of its obligations as set forth in this SOW.

The Client is expected to provide, as needed, either prior to or at the commencement of the engagement:

- A sponsor or project lead who is responsible for directing the activities of the consultant and ensuring results are delivered per expectations
- Access to application production and staging servers by Rogue Wave for the purpose of delivering the service.
- Someone readily available (Project Sponsor or Project Manager) to Rogue Wave who is familiar with the project, this SOW, and Rogue Wave's Agreement with the Client to resolve issues and facilitate communication
- Product knowledge or information to the Rogue Wave resources on products that are required for development, maintenance and support activities
- Adequate translation to Rogue Wave staff of any product, documentation, or other resource which is required by Rogue Wave to engage in development, maintenance, or support activities
- Identification of a technical resource that will be the primary point of contact for this project and provide resolutions to technical queries related to Rogue Wave
- Provide stable VPN connectivity between Rogue Wave and the systems where development collaboration took place
- The Client will provide to Rogue Wave acceptable secure means (i.e. SSH) for free communication with the outside network for the purposes of communicating and accessing other resources both internal and external to Rogue Wave for the purposes of completing this project

4. Assumptions

To facilitate the smooth delivery of this engagement, the following assumptions apply:

- The Client will provide the staff and resources as described in Section 3, Roles, Responsibilities & Expectations
- The engagement will begin at a date to be determined and negotiated between Rogue Wave and the Client and after receipt of a signed purchase order.
- All fees generated from work performed under this SOW will be considered earned as the work is completed.
- Rogue Wave and the Client agree to collaborate and follow a change management process to evaluate an appropriate course of action if it is determined that Rogue Wave will incur costs in excess of purchase order due to changes in Client requirements.

- Rogue Wave will notify the Client in writing if Rogue Wave believes inadequate attention or personnel are being devoted to the project. The Client agrees to address these deficiencies within 5 days of receiving written notice.
- Should any of these assumptions prove to be incorrect or incomplete, Rogue Wave reserves the right to modify the scope, schedule or price as documented in this SOW.

5. Project Pricing, Payment, and Delivery

The price for this engagement is as follows:

Item	Extent	Price
Klocwork Static Code Analysis Audit	Application consists of one (1) to five (5) million lines of non-blank non-comment of code	(as stated in the quote that refers to this SOW)

Unless a later date is expressly agreed, services must be scheduled and delivered within 6 months of purchase. Pre-paid fees for services not performed within the applicable time period will be forfeited. Time and materials services together with any applicable travel and expenses will be billed monthly in arrears at the rate specified herein which shall be guaranteed for a period of 6 months from the date of this quote. Customer is responsible for scheduling services subject to Rogue Wave’s availability. Scheduled services may be cancelled with a minimum of one (1) weeks’ notice; provided, however, that customer will be responsible for any unrecoverable travel and living expenses incurred by Rogue Wave as a result of such cancellation. As this is a fixed fee SOW, there are no minimum durations for the increments in which these services are delivered.