CodeArts Check

FAQs

Issue 01

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HUAWEI TECHNOLOGIES CO., LTD.

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1 General Issues

1.1 What Are the Role Permissions in CodeArts Check?
1.2 How Do I Use CodeArts Check?
1.3 Which Languages Can Be Checked by CodeArts Check?
1.4 Which of the Following Dimensions Can Be Checked by CodeArts Check?
1.5 Can I Check Local Code Using CodeArts Check?
1.6 Does CodeArts Check Only Check Bugs in Code Execution?
1.7 Can I Locate the Code Committer for a Bug?
1.8 Can I Select Multiple Rule Sets for a Code Check Task?
1.9 How Do I Export Code Issues?

1.1 What Are the Role Permissions in CodeArts Check?

Role Permission Table

This section describes the default roles and permissions of users in the CodeArts Check for resources (such as tasks and rule sets) in a project, as shown in **Table 1-1**.

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Table 1-1 Default role permissions in CodeArts Check

Role	Code Check Task	Rule Set	Rule	Issue
Project creator	• Create, view, delete, execute, and modify tasks of all members in a project.	Create, delete, and modify personal rule sets; view and use others' rule sets.	View	• View an issue list. • Export an issue list. • View issue details. • Create an issue ticket. • Handle issues.
Project manager				
Developer	• Create, view, execute, modify, and delete personal tasks. • Have permissions to view, execute, and modify others' tasks in the same code repository.			
Test manager	• Have no permissions to create or view tasks.	Create, delete, and modify personal rule sets, and view others' rule sets.		-
Tester				-
Participant				-
Viewer				-
O&M manager				-

1.2 How Do I Use CodeArts Check?

Background

CodeArts Check is a cloud code check service. With years of experience in automatic static check and enterprise application, CodeArts Check provides rich check services on code style, common quality, cyber security risk, and other elements. It also includes comprehensive check reports, convenient bug handling, and many other efficient, easy-to-use functions for enterprises to effectively improve code quality.

Operation Process

This section describes the basic process of using CodeArts Check.

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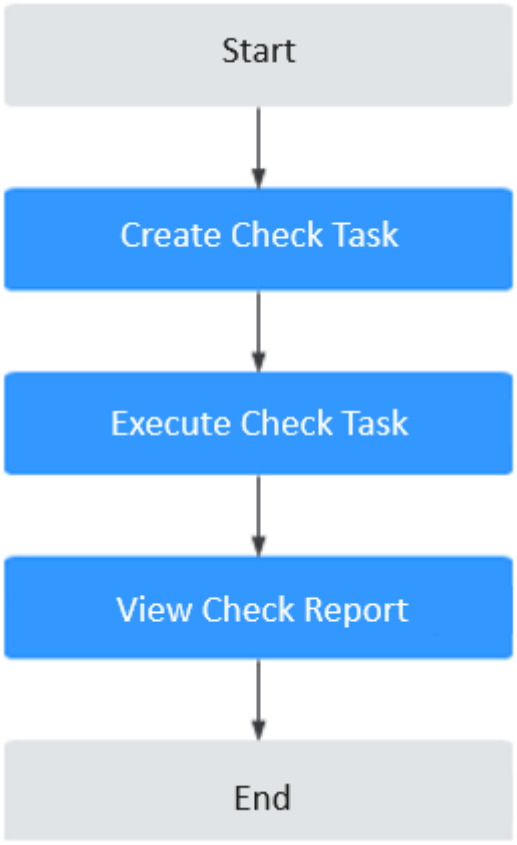
Figure 1-1 Basic operation process



Process Description

Process	Description
Create code check task	On the **CodeArts** homepage, choose **Services > Check**, and click **Create Task** to create a code check task.
Execute code check task	After a check task is created, click **Start Check** on the task details or the task list page.
View code check report	After the check is complete, you can view the task details, such as the **Overview**, **Issues**, **Metrics, Logs**, and **Settings**.

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1.3 Which Languages Can Be Checked by CodeArts Check?

Currently, Java, C++, JavaScript, TypeScript, C#, Python, PHP, Go, HTML, and CSS are supported. More languages will be supported in the future.

1.4 Which of the Following Dimensions Can Be Checked by CodeArts Check?

CodeArts Check checks and analyzes the source code from the aspects of **coding style, issue, security**, and **architecture design**. It reports code defects, analyzes the **cyclomatic complexity** and **duplication rate** of the source code, evaluates the code risk index, and provides fix suggestions based on the check result.

1.5 Can I Check Local Code Using CodeArts Check?

No.

CodeArts Check cannot be used independently and needs to work with cloud-based code repositories.

CodeArts Check applies only to cloud code repositories. You need to submit local code to these repositories to check and analyze code on the cloud.

1.6 Does CodeArts Check Only Check Bugs in Code Execution?

No.

CodeArts Check performs static analysis on specified source code in the code repositories. That is, it scans program code using techniques such as lexical and syntactic analysis without running the code, to check whether the code meets metrics such as standardization, security, reliability, and maintainability. In addition, it provides examples and fix suggestions for detected code issues.

1.7 Can I Locate the Code Committer for a Bug?

Currently, you can only locate a line of code and the corresponding code file in the code check results. However, you can view the commit records in the code repository to check which member has modified the file and then locate the code committer.

NOTE

Before committing a code merge request, you should check and modify the code.

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1.8 Can I Select Multiple Rule Sets for a Code Check Task?

Yes.

The rule set of a task depends on the language type of code in the repository. Therefore, in a task, multiple rule sets can be selected for multiple languages, but only one rule set can be selected for one language.

1.9 How Do I Export Code Issues?

Step 1 Go to the **View Task Details** page, and click **Issues** tab.

Step 2 Filter code issues to be exported on the left of the page, for example by **Issue Level** or **Issue Status**.

Step 3 Select the target issues and click **Export** in the lower part of the page.

----End

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2 Using CodeArts Check

2.1 Executing Task. Try Again Later

2.2 Insufficient Permission. Please Check and Try Again

2.3 Cppcheck Cannot Tokenize the Code Correctly

2.4 No Data Is Displayed After a Task Check Is Complete

2.5 Permission Is Insufficient for Using Public APIs

2.6 A Message Is Displayed Indicating that the Project Does Not Exist When a Public API Is Used

2.7 Setting Build Parameters

2.8 Failed to Check a TypeScript Task

2.1 Executing Task. Try Again Later

Symptom

A task fails to be executed, and the following error message is displayed: "Executing task. Try again later."

Cause Analysis

The task is running. As a result, the pipeline fails to be executed.

Solution

Step 1 Enter the current code check task from the pipeline.

Step 2 Check whether the current task is executing. If yes, wait until the executing is complete and then run the pipeline.

If the issue persists, contact technical support.

----End

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2.2 Insufficient Permission. Please Check and Try Again

Symptom

The task fails to be executed, and the following error message is displayed: "Insufficient permission. Please check and try again."

Cause Analysis

The current user does not have the permission to perform this task. Check the permission and contact the project administrator (project creator or project manager) to change the permission of the current account.

Solution

Step 1 Choose **Settings** > **General** > **Service Permissions** > **Member** to view your project role, and click **Permissions** to view corresponding role permissions.

Step 2 Contact the project administrator to modify the required **project role** based on the **Roles and Permissions**.

----End

2.3 Cppcheck Cannot Tokenize the Code Correctly

Symptom

Cppcheck cannot tokenize the code correctly is displayed during code check.

Cause Analysis

It is a rule of Cppcheck. The code contains syntax errors, which are caused by C code written using Java syntax.

Solution

The code must be written according to coding specifications of the C language and cannot contain the coding rules of other languages.

2.4 No Data Is Displayed After a Task Check Is Complete

Symptom

No data is displayed after a task check is complete.

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Cause Analysis

- The language of the source code repository is not obtained.
- The language check switch is not enabled.

Solution

Step 1 Click a task name. On the displayed page, click **Settings** > **Rule Sets**.

Step 2 Click in the row where **Languages Included** is located to re-obtain the language of the code repository.

Step 3 Enable the language check.

Step 4 Execute the check again.

----End

2.5 Permission Is Insufficient for Using Public APIs

Symptom

The permission is insufficient for using public APIs.

Cause Analysis

- The login user does not have the permission.
- The region information is incorrect.

Solution

Step 1 Check whether the login user has the permission. For details, see **Roles and Permissions**.

Step 2 Check whether the region information is correct.

If the issue persists, contact technical support.

----End

2.6 A Message Is Displayed Indicating that the Project Does Not Exist When a Public API Is Used

Symptom

When a public API is used, a message is displayed, indicating that the project does not exist.

Cause Analysis

The task ID is incorrect.

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Solution

Use a correct task ID. If the issue persists, contact technical support.

2.7 Setting Build Parameters

Java Tasks

To use a comprehensive rule set or security rule set, you need to set check parameters for checking build result files.

Step 1 Click a task name. On the displayed page, click **Settings** > **Rule Sets**.

Step 2 Click in the row where **Languages Included** is located to re-obtain the language of the code repository.

Step 3 Click **Check Parameter**.

Step 4 Select the Java build tool and tool version, and enter the build command.

Step 5 In the **Check Parameter** dialog box, turn on the switch and click **OK**.

----End

2.8 Failed to Check a TypeScript Task

Symptom

A TypeScript task fails to be checked, reporting a 404 error in the log.

Solution

Check whether the **package-lock.json** file has been uploaded.

- If yes, delete the **package-lock.json** file and push the code again for check.
- If no, contact technical support.

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3 Security

3.1 How Does CodeArts Check Secure Customer Code?

3.2 Can I Use CodeArts Check to Check Security Issues Such as SQL Injection?

3.1 How Does CodeArts Check Secure Customer Code?

Accounts are authenticated by IAM in a unified manner. Each project has a permission management mechanism. Only project administrators can manage project members.

3.2 Can I Use CodeArts Check to Check Security Issues Such as SQL Injection?

Yes.

CodeArts Check supports functions such as coding style, issues, and security, as well as architecture design. In coding security, SQL injection, XML external entity injection attacks, potential LDAP injection attacks, and potential Xpath injection attacks can be checked.

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