

CodeCheck

FAQs

Issue 01
Date 2022-09-30



Copyright © Huawei Technologies Co., Ltd. 2022. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions



HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Contents

1 General FAQs.....	1
1.1 What Are CodeCheck Role Permissions?.....	1
1.2 How Do I Use CodeCheck?.....	2
1.3 What Regions Does CodeCheck Support?.....	3
1.4 Which Languages Can Be Checked By CodeCheck?.....	4
1.5 Which Dimensions Can Be Checked by CodeCheck?.....	4
1.6 Can I Check Local Code Using CodeCheck?.....	4
1.7 Does CodeCheck Only Check Bugs in Code Execution?.....	4
1.8 Can I Locate the Code Submitter for a CodeCheck Defect?.....	4
1.9 Can I Select Multiple Rule Sets for a CodeCheck Task?.....	5
1.10 How Do I Export Code Issues?.....	5
2 CodeCheck Usage.....	6
2.1 Executing Task. Try Again Later.....	6
2.2 Insufficient Permission. Please Check and Try Again.....	7
2.3 Cppcheck Cannot Tokenize the Code Correctly.....	7
2.4 No Data Is Displayed After a Task Check Is Complete.....	7
2.5 Permission Is Insufficient for Using Public APIs.....	8
2.6 A Message Is Displayed Indicating that the Project Does Not Exist When a Public API Is Used.....	8
2.7 Failed to Check a TypeScript Task.....	9
3 Security.....	10
3.1 How Does CodeCheck Secure Customer Code?.....	10
3.2 Can I Use CodeCheck to Check Security Issues Such as SQL Injection?.....	10

1 General FAQs

- [1.1 What Are CodeCheck Role Permissions?](#)
- [1.2 How Do I Use CodeCheck?](#)
- [1.3 What Regions Does CodeCheck Support?](#)
- [1.4 Which Languages Can Be Checked By CodeCheck?](#)
- [1.5 Which Dimensions Can Be Checked by CodeCheck?](#)
- [1.6 Can I Check Local Code Using CodeCheck?](#)
- [1.7 Does CodeCheck Only Check Bugs in Code Execution?](#)
- [1.8 Can I Locate the Code Submitter for a CodeCheck Defect?](#)
- [1.9 Can I Select Multiple Rule Sets for a CodeCheck Task?](#)
- [1.10 How Do I Export Code Issues?](#)

1.1 What Are CodeCheck Role Permissions?

Role Permission Table

Table 1-1 describes the default role permissions of CodeCheck users to deal with resources (such as tasks and rule sets) in a project.

Table 1-1 Default role permissions for CodeCheck

Role	CodeCheck 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.
Project manager				

Role	CodeCheck Task	Rule Set	Rule	Issue
Developer	<ul style="list-style-type: none">• Create, view, execute, modify, and delete personal tasks.• Have permissions to view, execute, and modify others' tasks in the same code repository.			<ul style="list-style-type: none">• Create an issue ticket.• Handle issues.
Test manager	<ul style="list-style-type: none">• Have no permissions to create or view tasks.	Create, delete, and modify personal rule sets, and view others' rule sets.		-
Tester				-
Participant				-
Viewer				-
Custom role				-

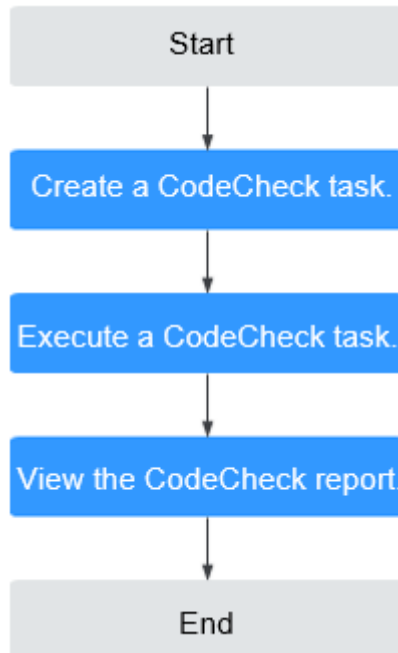
1.2 How Do I Use CodeCheck?

Background

CodeCheck is a cloud-based code check service. It provides developers with multi-language static code check, defect improvement suggestions, and detailed quality reports, helping teams maintain code quality.

Operation Process

The following describes the basic operation process of using **CodeCheck**.

Figure 1-1 Basic operation process

Process Description

Process	Description
Create a CodeCheck task	On the DevCloud homepage, choose Services > CodeCheck . Click Create Task to create a CodeCheck task.
Execute a CodeCheck task	After a CodeCheck task is created, click Start Check on the task details or the task list page.
View the CodeCheck report	After the check is complete, you can view the task details. <ul style="list-style-type: none">• Overview: displays the check result chart.• Issues: displays defect details and modification suggestions.• Logs: displays the execution history, procedure logs, and check parameter details.• Settings: allows you to configure CodeCheck tasks (such as changing check rule sets and setting quality gates).

1.3 What Regions Does CodeCheck Support?

Currently, CodeCheck is available in the following regions:

- LA-Mexico City2
- LA-Sao Paulo1

- AP-Singapore

1.4 Which Languages Can Be Checked By CodeCheck?

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

1.5 Which Dimensions Can Be Checked by CodeCheck?

CodeCheck mainly checks and analyzes source code from the aspects of coding style, coding issues, coding security, and architecture design. It reports code defects, analyzes the cyclomatic complexity and repetition rate of source code, evaluates the code risk index based on the check result, and provides modification suggestions.

1.6 Can I Check Local Code Using CodeCheck?

No.

CodeCheck cannot be used alone. It can be used only after code is uploaded by working together with CodeHub.

CodeCheck applies only to cloud-based code repositories. You need to submit local code to these repositories for checking and analyzing cloud-based code.

1.7 Does CodeCheck Only Check Bugs in Code Execution?

No.

CodeCheck 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 modification suggestions for analyzed code defects.

1.8 Can I Locate the Code Submitter for a CodeCheck Defect?

No.

Currently, you can only locate a line of code and the corresponding code file in the CodeCheck result. However, you can view the submission records in the code repository to check which member has modified the file and then locate the code submitter.

 NOTE

Before submitting a code merge request, project members must execute a CodeCheck task and modify the code correctly.

1.9 Can I Select Multiple Rule Sets for a CodeCheck Task?

Yes.

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

1.10 How Do I Export Code Issues?

Step 1 On the CodeCheck details page, click the **Issues** tab.

Step 2 In the filter on the left of the page, filter code issues to be exported, 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

2 CodeCheck Usage

- [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 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."

Root Cause

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

Solution

- Step 1** Enter the current CodeCheck task from the pipeline.
- Step 2** Check whether the current task is running. If yes, wait until the running is complete and then run the pipeline.

If the issue persists, contact technical support.

----End

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."

Root Cause

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

Solution

- Step 1** Choose **Settings > General > Members** and view your project role permissions.
- Step 2** Contact the project administrator to obtain the required project role based on the [CodeCheck Permission Matrix](#).

----End

2.3 Cppcheck Cannot Tokenize the Code Correctly

Symptom

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

Root Cause

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.

Root Cause

1. The language of the source code repository is not obtained.
2. The language check switch is not turned on.

Solution

Step 1 Choose **Settings > Rule Sets**.

Step 2 Click  after **Languages Included** to refresh the language of the code repository.

Step 3 Turn on the language check.

Step 4 Perform the check again.

----End

2.5 Permission Is Insufficient for Using Public APIs

Symptom

The permission is insufficient for using public APIs.

Root Cause

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

Solution

Step 1 Check whether the login user has the permission.

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.

Root Cause

The task ID is incorrect.

Solution

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

2.7 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.

3 Security

[3.1 How Does CodeCheck Secure Customer Code?](#)

[3.2 Can I Use CodeCheck to Check Security Issues Such as SQL Injection?](#)

3.1 How Does CodeCheck Secure Customer Code?

Accounts are authenticated by IAM in a unified manner. Each project in project management has a permission management mechanism. Only project administrators can manage project members. For more security information, see [Trust Center](#).

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

Yes.

CodeCheck supports functions such as coding style, coding issues, coding security, and architecture design. In terms of coding security, CodeCheck supports checking SQL injection, XML external entity injection, potential LDAP injection, and potential XPath injection attacks.