

What is claimed is:

1. A method for code snippet translation, applied to a code server, the method comprising:

acquiring a to-be-translated analysis result set; the to-be-translated analysis result set comprises a to-be-translated code snippet and a context code snippet corresponding to the to-be-translated code snippet;

looking up a code processor matching the to-be-translated code snippet according to a programming language type of the to-be-translated code snippet;

identifying a target language type and a translation policy of the to-be-translated code snippet according to the context code snippet and by the code processor; and

calling a translator interface provided by a translator system by the code processor, the translator system being deployed on a translation server, and the translator system translating the to-be-translated code snippet into a translated code snippet of a corresponding target language type based on the translation policy;

wherein the calling the translator interface provided by the translator system by the code processor comprises:

acquiring a user identifier;

generating a translation request according to the user identifier, the to-be-translated code snippet, the target language type, and the translation policy by:

concatenating the user identifier, to-be-translated code snippet, target language type, and translation policy to generate an initial string;

encrypting the initial string to obtain a request string; and

generating a translation request according to the request string corresponding to a plurality of to-be-translated code snippets when the to-be-translated analysis result set contains the plurality of to-be-translated code snippets.

2. The method according to claim 1, wherein the acquiring the to-be-translated

analysis result set comprises:

- acquiring a to-be-translated source code file;
- reading a source code directory in the to-be-translated source code file; the directory of the to-be-translated source code comprises a plurality of initial file names;
- traversing an initial code sub-file corresponding to each of the initial file names, and filtering out a to-be-translated code sub-file; the to-be-translated code sub-file matching a preset language type;
- looking up a parser matching the preset language type; and
- acquiring a snippet locating information of the to-be-translated code snippet in the to-be-translated code sub-file by the parser, extracting the to-be-translated code snippet based on the snippet locating information, and generating a to-be-translated analysis result set according to the to-be-translated code snippet and the snippet locating information; the to-be-translated analysis result set comprises the to-be-translated code snippet in the to-be-translated code sub-file and the context code snippet corresponding to the to-be-translated code snippet.

3. The method according to claim 2, after the identifying the target language type and the translation policy of the to-be-translated code snippet according to the context code snippet and by the code processor, the method further comprising:

- determining a translation operation according to the translation policy by the code processor;
- correspondingly replacing the to-be-translated code snippet in the to-be-translated source code file with the translated code snippet based on the snippet locating information when the translation operation is a replacing operation; and
- outputting a translated source code file of the target language type.

4. The method according to claim 1, wherein the looking up the code processor matching the to-be-translated code snippet comprises:

- identifying a programming language type of the to-be-translated code snippet

based on a regular expression;

looking up a code processor set corresponding to the programming language type;

matching the to-be-translated code snippet with matching criteria corresponding to each code processor in the code processor set; and

regarding the code processor matching the matching criteria as the code processor matching the to-be-translated code snippet.

5. The method according to claim 1, further comprising:

sending the translation request to the translation server through a translator interface; the translation request is configured to instruct the translation server to translate the to-be-translated code snippet into the target language type using the translation policy after the user identifier is authenticated; and

receiving a translated code snippet of the target language type and returned by the translation server.

6. The method according to any one of claims 1 to 5, the method further comprising:

performing a risk level assessment on a translation result of each to-be-translated code snippet by examining the context code snippet; and

recording a processing state of each to-be-translated code snippet.

7. An apparatus for code snippet translation, comprising:

an acquiring module, configured to acquire a to-be-translated analysis result set; the to-be-translated analysis result set comprises a to-be-translated code snippet and a context code snippet corresponding to the to-be-translated code snippet;

a looking up module, configured to look up a code processor matching the to-be-translated code snippet according to a programming language type of the to-be-translated code snippet;

an identification module, configured to identify a target language type and a

translation policy of the to-be-translated code snippet according to the context code snippet and by the code processor; and

a translation module, configured to call a translator interface provided by a translator system by the code processor, the translator system being deployed on a translation server, and the translator system translating the to-be-translated code snippet into a translated code snippet of a corresponding target language type based on the translation policy;

wherein translation module is further configured to:

acquire a user identifier;

generate a translation request according to the user identifier, the to-be-translated code snippet, the target language type, and the translation policy;

concatenate the user identifier, to-be-translated code snippet, target language type, and translation policy to generate an initial string;

encrypt the initial string to obtain a request string; and

generate a translation request according to the request string corresponding to a plurality of to-be-translated code snippets when the to-be-translated analysis result set contains the plurality of to-be-translated code snippets.

8. A computer device comprising a memory and one or more processors, the memory storing computer-readable instructions that, when executed by the one or more processors, causing the one or more processors to perform the steps of:

acquiring a to-be-translated analysis result set; the to-be-translated analysis result set comprises a to-be-translated code snippet and a context code snippet corresponding to the to-be-translated code snippet;

looking up a code processor matching the to-be-translated code snippet according to a programming language type of the to-be-translated code snippet;

identifying a target language type and a translation policy of the to-be-translated code snippet according to the context code snippet and by the code

processor; and

calling a translator interface provided by a translator system by the code processor, the translator system being deployed on a translation server, and the translator system translating the to-be-translated code snippet into a translated code snippet of a corresponding target language type based on the translation policy;

wherein the one or more processor further execute(s) the instructions to perform the steps of:

acquiring a user identifier;

generating a translation request according to the user identifier, the to-be-translated code snippet, the target language type, and the translation policy;

concatenating the user identifier, to-be-translated code snippet, target language type, and translation policy to generate an initial string;

encrypting the initial string to obtain a request string; and

generating a translation request according to the request string corresponding to a plurality of to-be-translated code snippets when the to-be-translated analysis result set contains the plurality of to-be-translated code snippets.

9. The computer device according to claim 8, wherein the one or more processor further execute(s) the instructions to perform the steps of:

acquiring a source code directory in the to-be-translated source code file; the directory of the to-be-translated source code comprises a plurality of initial file names;

traversing an initial code sub-file corresponding to each of the initial file names, and filtering out a to-be-translated code sub-file; the to-be-translated code sub-file matching a preset language type;

looking up a parser matching the preset language type; and

acquiring a snippet locating information of the to-be-translated code snippet in the to-be-translated code sub-file by the parser, extracting the to-be-translated code snippet based on the snippet locating information, and generating a to-be-translated analysis result set according to the to-be-translated code snippet and the snippet

locating information; the to-be-translated analysis result set comprises the to-be-translated code snippet in the to-be-translated code sub-file and the context code snippet corresponding to the to-be-translated code snippet.

10. The computer device according to claim 9, wherein the one or more processor further execute(s) the instructions to perform the steps of:

- determining a translation operation according to the translation policy by the code processor;

- correspondingly replacing the to-be-translated code snippet in the to-be-translated source code file with the translated code snippet based on the snippet locating information when the translation operation is a replacing operation; and

- outputting a translated source code file of the target language type.

11. The computer device according to claim 8, wherein the one or more processor further execute(s) the instructions to perform the steps of:

- identifying a programming language type of the to-be-translated code snippet based on a regular expression;

- looking up a code processor set corresponding to the programming language type;

- matching the to-be-translated code snippet with matching criteria corresponding to each code processor in the code processor set; and

- regarding the code processor matching the matching criteria as the code processor matching the to-be-translated code snippet.

12. The computer device according to claim 8, wherein the one or more processor further execute(s) the instructions to perform the steps of:

- sending the translation request to the translation server through a translator interface; the translation request is configured to instruct the translation server to translate the to-be-translated code snippet into the target language type using the translation policy after the user identifier is authenticated; and

receiving a translated code snippet of the target language type and returned by the translation server.

13. The computer device according to any one of claims 8 to 12, wherein the one or more processor further execute(s) the instructions to perform the steps of:

performing a risk level assessment on a translation result of each to-be-translated code snippet by examining the context code snippet; and
recording a processing state of each to-be-translated code snippet.

14. One or more non-volatile computer-readable storage media storing computer-readable instructions that, when executed by one or more processors, causing the one or more processors to perform the steps of:

acquiring a to-be-translated analysis result set; the to-be-translated analysis result set comprises a to-be-translated code snippet and a context code snippet corresponding to the to-be-translated code snippet;

looking up a code processor matching the to-be-translated code snippet according to a programming language type of the to-be-translated code snippet;

identifying a target language type and a translation policy of the to-be-translated code snippet according to the context code snippet and by the code processor; and

calling a translator interface provided by a translator system by the code processor, the translator system being deployed on a translation server, and the translator system translating the to-be-translated code snippet into a translated code snippet of a corresponding target language type based on the translation policy;

wherein the one or more processors further execute(s) the instructions to perform the steps of:

acquiring a user identifier;

generating a translation request according to the user identifier, the to-be-translated code snippet, the target language type, and the translation policy;

concatenating the user identifier, to-be-translated code snippet, target language type, and translation policy to generate an initial string;
encrypting the initial string to obtain a request string; and
generating a translation request according to the request string corresponding to a plurality of to-be-translated code snippets when the to-be-translated analysis result set contains the plurality of to-be-translated code snippets.

15. The computer-readable storage medium of claim 14, wherein the one or more processors further execute(s) the instructions to perform the steps of:

acquiring a to-be-translated source code file;
reading a source code directory in the to-be-translated source code file; the directory of the to-be-translated source code comprises a plurality of initial file names;
traversing an initial code sub-file corresponding to each of the initial file names, and filtering out a to-be-translated code sub-file; the to-be-translated code sub-file matching a preset language type;
looking up a parser matching the preset language type; and
acquiring a snippet locating information of the to-be-translated code snippet in the to-be-translated code sub-file by the parser, extracting the to-be-translated code snippet based on the snippet locating information, and generating a to-be-translated analysis result set according to the to-be-translated code snippet and the snippet locating information; the to-be-translated analysis result set comprises the to-be-translated code snippet in the to-be-translated code sub-file and the context code snippet corresponding to the to-be-translated code snippet.

16. The computer-readable storage medium of claim 14, wherein the one or more processors further execute(s) the instructions to perform the steps of:

identifying a programming language type of the to-be-translated code snippet based on a regular expression;
looking up a code processor set corresponding to the programming language

type;

matching the to-be-translated code snippet with matching criteria corresponding to each code processor in the code processor set; and

regarding the code processor matching the matching criteria as the code processor matching the to-be-translated code snippet.

17. The computer-readable storage medium of claim 14, wherein the one or more processors further execute(s) the instructions to perform the steps of:

sending the translation request to the translation server through a translator interface; the translation request is configured to instruct the translation server to translate the to-be-translated code snippet into the target language type using the translation policy after the user identifier is authenticated; and

receiving a translated code snippet of the target language type and returned by the translation server.

18. The computer-readable storage medium according to any one of claims 14 to 17, wherein the one or more processors further execute(s) the instructions to perform the steps of:

performing a risk level assessment on a translation result of each to-be-translated code snippet by examining the context code snippet; and

recording a processing state of each to-be-translated code snippet.