



FUJITSU Software

SIMPLIA TF-EXCOUNTER V70L12

User's Guide

Windows

SIMPLIA-ECT-EM70(05)
February 2016

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Preface

SIMPLIA TF-EXCOUNTER supports the comprehension of the amount of testing, prevention of test omission, and enhancement of efficiency in the testing process using the COUNT information output by NetCOBOL.

To Read the Help

Please use a web browser that supports HTML 4.01.

"NetCOBOL" and "COBOL97" are collectively described as "COBOL" in this User's Guide.

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- Microsoft, Windows, and Windows Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.
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Abbreviations

The following abbreviations are used in this User's Guide.

"Windows(R) 10 Home", "Windows(R) 10 Pro", "Windows(R) 10 Enterprise", or "Windows(R) 10 Education"	->	"Windows 10"
"Windows(R) 8.1", "Windows(R) 8.1 Pro", or "Windows(R) 8.1 Enterprise"	->	"Windows 8.1"
"Windows(R) 8", "Windows(R) 8 Pro", or "Windows(R) 8 Enterprise"	->	"Windows 8"
"Windows(R) 7 Home Premium", "Windows(R) 7 Professional", "Windows(R) 7 Enterprise, or "Windows(R) 7 Ultimate"	->	"Windows 7"
"Microsoft(R) Windows Server(R) 2012 R2 Datacenter", "Microsoft(R) Windows Server(R) 2012 R2 Standard", "Microsoft(R) Windows Server(R) 2012 R2 Essentials", or	->	"Windows Server 2012" or "Windows Server 2012 R2"

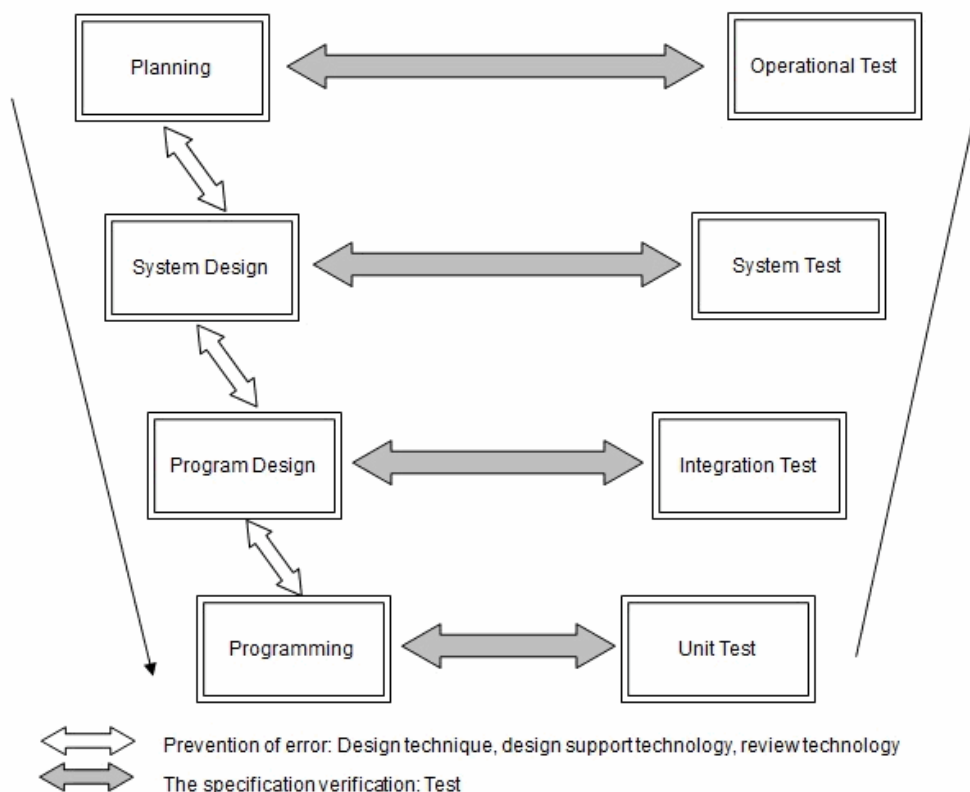
"Microsoft(R) Windows Server(R) 2012 R2 Foundation"		
"Microsoft(R) Windows Server(R) 2012 Datacenter", "Microsoft(R) Windows Server(R) 2012 Standard", "Microsoft(R) Windows Server(R) 2012 Essentials", or "Microsoft(R) Windows Server(R) 2012 Foundation"	->	"Windows Server 2012"
"Microsoft(R) Windows Server(R) 2008 R2 Datacenter", "Microsoft(R) Windows Server(R) 2008 R2 Standard", "Microsoft(R) Windows Server(R) 2008 R2 Enterprise", or "Microsoft(R) Windows Server(R) 2008 R2 Foundation"	->	"Windows Server 2008 R2"
"Windows 10", "Windows 8", "Windows 8.1", "Windows 7", "Windows Server 2012", or "Windows Server 2008 R2"	->	"Windows"

Chapter 1 Background and Purpose

1) The Need for Testing

Software development consists of the phases from design to programming and the testing phase. To develop high-quality software, mistakes must be prevented in the phases from design to programming, and in the testing phase specifications must be checked without any omissions.

For the earlier phase, various design techniques, design support techniques, and review techniques have been developed and applied, but this is still not enough to ensure quality. At present, there is no method of verifying the final quality, except testing all of the specifications.



2) The Negative Effects of Test Omission

The fact that there is "test omission" means "quality is unconfirmed", and this is not the same as "quality is poor". However, it cannot be considered as "good quality" unless quality is ensured in the phases from design to programming. If test omission occurs, quality is highly dependent on the amount of mistakes that occur in the phases from design to programming, and how much test omission occurs in the testing phase.

3) The Need for Evaluation of Tests

How can we know whether test omission occurs?

When the evaluation whether testing is sufficient depends on the subjective opinion of testers, the possibility of test omission rises because the experience, skill, and awareness of the testers have a major influence.

Therefore, a method for objectively evaluating the amount of testing is needed. The number of test items (the number of functions confirmed by testing) and the execution coverage (the ratio of the executed part to the whole) can be used to measure the amount of testing.

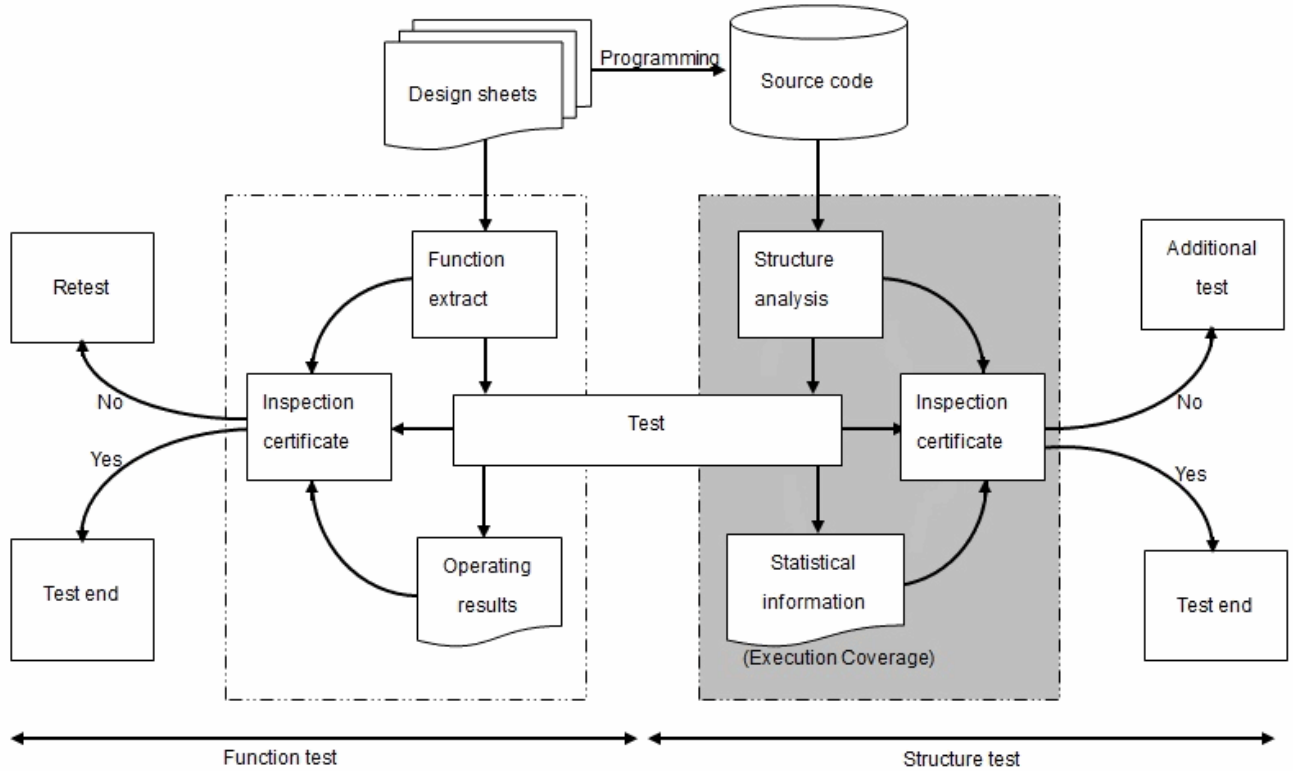
4) Regarding Instruction Execution Coverage

Testing includes functional tests (based on functional aspects) and structural tests (based on structural aspects).

The number of test items is effective for measurement of the functional tests, and the instruction execution coverage is effective for measurement of structural tests.

Although structural tests are especially effective in the first half of the test process, such as the program unit test, tools are needed to support testing because manual evaluation of the structural aspect is difficult.

There are various types of instruction execution coverage according to the unit of measurement, such as all instructions, all branches, and all paths, etc. This tool measures the percentage of instruction execution based on the total number of instructions, and objectively provides quality information for software using numerical values.



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Chapter 2 Overview

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Chapter 9 Messages

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9.1 Message List

10000 Please specify the correct storage folder for the COUNTLOG file.

[Description]

There is an error in the storage folder of COUNTLOG files.

[Corrective Action]

Specify the COUNTLOG storage folder again.

10001 Please specify the correct COUNT information file.

[Description]

The specified file is not a COUNT information file.

[Corrective Action]

Specify the COUNT information file again.

10002 Please specify the test case name.

[Description]

A test case name has not been specified.

[Corrective Action]

When there is a test case, input of the test case name is required.

10003 An error occurred while reading the COBOL source file COBOL source file name:(%1) Details:(%2)

[Description]

An error occurred while reading a COBOL source file.

%1: Path name of the COBOL source file

%2: [Details](#)

[Corrective Action]

Check the COBOL source file and perform specification again.

10004 A memory shortage occurred while reading the COBOL source file.

[Description]

A memory shortage occurred while reading a COBOL source file.

[Corrective Action]

Close any unnecessary applications and then perform the operation again.

10006 Unable to find the PROCEDURE DIVISION in the COBOL source file. COBOL source file:(%1)

[Description]

PROCEDURE DIVISION was not found in a COBOL source file.

%1: Path name of the COBOL source file

[Corrective Action]

A COBOL source file must contain a PROCEDURE DIVISION.

**10007 Unable to find the PROGRAM-ID in the COBOL source file.
COBOL source file name:(%1)**

[Description]

PROGRAM-ID was not found in a COBOL source file.

%1: Path name of the COBOL source file

[Corrective Action]

A COBOL source file must contain a PROGRAM-ID.

**10008 An error occurred when opening the COBOL source file.
COBOL source file:(%1)
Details:(%2)**

[Description]

An error occurred when opening a COBOL source file.

%1: Path name of the COBOL source file

%2: [Details](#)

[Corrective Action]

Check the COBOL source file and perform specification again.

10009 A memory shortage occurred while merging the test cases.

[Description]

A memory shortage occurred during the merge processing of test cases.

[Corrective Action]

Close any unnecessary applications and then perform the operation again.

10010 Unable to find the line information.

[Description]

There was no line information in the COUNTLOG file.

[Corrective Action]

The COUNTLOG file may have been damaged. Create the COUNTLOG file again using Accumulation.

10011 There is no internal program information.

[Description]

There was no internal program information in the COUNTLOG file.

[Corrective Action]

The COUNTLOG file may have been damaged. Create the COUNTLOG file again using Accumulation.

**10012 An error occurred while reading the COUNTLOG file.
COUNTLOG file name: (%1)
Details:(%2)**

[Description]

An error occurred while reading a COUNTLOG file.

%1: COUNTLOG file name

%2: [Details](#)

[Corrective Action]

Check the COUNTLOG file and perform specification again.

10013 A memory shortage occurred while reading the COUNTLOG file.**[Description]**

A memory shortage occurred while reading a COUNTLOG file.

[Corrective Action]

Close any unnecessary applications and then perform the operation again.

10014 An error occurred while reading the COUNTLOG file.

COUNTLOG file name:(%1)

Details:(%2)

[Description]

An error occurred while reading a COUNTLOG file.

%1: COUNTLOG file name

%2: [Details](#)

[Corrective Action]

Check the COUNTLOG file and perform specification again.

10015 An error occurred when opening the COUNTLOG file.

COUNTLOG file name:(%1)

Details:(%2)

[Description]

An error occurred when opening a COUNTLOG file.

%1: COUNTLOG file name

%2: [Details](#)

[Corrective Action]

Check the COUNTLOG file and perform specification again.

10016 An error occurred while writing to the COUNTLOG file.

COUNTLOG file:(%1)

Details:(%2)

[Description]

An error occurred while writing to a COUNTLOG file.

%1: COUNTLOG file name:(%1)

%2: [Details](#)

[Corrective Action]

Check the COUNTLOG file and perform specification again.

10017 A memory shortage occurred while writing to the COUNTLOG file.**[Description]**

A memory shortage occurred while writing to a COUNTLOG file.

[Corrective Action]

Close any unnecessary applications and then perform the operation again.

10018 An error occurred while writing to the COUNTLOG file.
COUNTLOG file:(%1)
Details:(%2)

[Description]

An error occurred while writing to a COUNTLOG file.

%1: COUNTLOG file name

%2: [Details](#)

[Corrective Action]

Check the COUNTLOG file and perform specification again.

10019 An error occurred while writing to the CSV file.
CSV file name: (%1)
Details:(%2)

[Description]

An error occurred while writing to a CSV file.

%1: CSV file name

%2: [Details](#)

[Corrective Action]

Check the CSV file and perform specification again.

10020 An error occurred when opening the CSV file.
CSV file:(% 1)
Details:(%2)

[Description]

An error occurred when opening a CSV file.

%1: CSV file name

%2: [Details](#)

[Corrective Action]

Check the CSV file and perform specification again.

10021 An error occurred while writing to the exclusion statement number direction file.
Exclusion statement number direction file:(%1)
Details:(%2)

[Description]

An error occurred while writing to an exclusion statement number direction file.

%1: Name of the exclusion statement number direction file

%2: [Details](#)

[Corrective Action]

Check the exclusion statement number direction file and perform specification again.

10023 An error occurred while opening the exclusion statement number direction file.
Exclusion statement number direction file:(%1)

Details:(%2)

[Description]

An error occurred when opening an exclusion statement number direction file.

%1: Name of the exclusion statement number direction file

%2: [Details](#)

[Corrective Action]

Check the exclusion statement number direction file and perform specification again.

10024 Failed to create the CSV file.

[Description]

Creation of a CSV file has failed.

[Corrective Action]

For detailed information, refer to the message that was output prior to this message.

10025 Failed to create the exclusion statement number direction file.

[Description]

Creation of an exclusion statement number direction file has failed.

[Corrective Action]

For detailed information, refer to the message that was output prior to this message.

10026 The exclusion statement number direction file was not created as there are no unexecuted lines.

[Description]

There are no unexecuted lines.

[Corrective Action]

When an unexecuted line exists, create an exclusion statement number direction file.

10027 The number of programs does not match the previous information.

[Description]

The number of programs does not match the previous information.

[Corrective Action]

When a program is changed, create a new COUNTLOG file using Accumulation.

10028 The program name does not match the previous information.

[Description]

The program name does not match the previous information.

[Corrective Action]

When a program is changed, create a new COUNTLOG file using Accumulation.

10029 The line information of the program does not match the previous information.

[Description]

The line information of a program does not match the previous information.

[Corrective Action]

When a program is changed, create a new COUNTLOG file using Accumulation.

10030 The line number of the PROCEDURE DIVISION does not match the previous information.

[Description]

The line number of PROCEDURE DIVISION does not match the previous information.

[Corrective Action]

When a program is changed, create a new COUNTLOG file using Accumulation.

10031 No COUNTLOG file is selected.

[Description]

No COUNTLOG file has been selected.

[Corrective Action]

Select a COUNTLOG file and then perform the operation again.

10032 A memory shortage occurred while merging the test cases.

[Description]

A memory shortage occurred during the merge processing of test cases.

[Corrective Action]

Close any unnecessary applications and then perform the operation again.

10033 Unable to find the test case.

[Description]

There was no test case information in the COUNTLOG file.

[Corrective Action]

The COUNTLOG file may have been damaged.

Create the COUNTLOG file again using Accumulation.

10034 There is a difference between the number of programs in the COUNTLOG file and COBOL programs.

The number of programs in the COUNTLOG file:(%1)

The number of COBOL programs:(%2)

[Description]

There is a difference in the number of internal programs between a COUNTLOG file and COBOL.

The programs may not be those of the target.

%1: The number of internal programs of the COUNTLOG file

%2: The number of internal programs of COBOL

[Corrective Action]

Specify the correct source file.

When a program is changed, create a new COUNTLOG file using Accumulation.

10035 There is a difference between the PROGRAM-ID of the COUNTLOG file

and COBOL.

COUNTLOG file PROGRAM-ID:(%1)

COBOL PROGRAM-ID:(%2)

[Description]

The program ID of a COUNTLOG file is different from that of COBOL.

The programs may not be those of the target.

%1: Program ID of the COUNTLOG file

%2: Program ID of COBOL

[Corrective Action]

Specify the correct source file.

When a program is changed, create a new COUNTLOG file using Accumulation.

10036 There is a difference between the line number of the COUNTLOG file's PROCEDURE DIVISION and the line number of COBOL's PROCEDURE DIVISION.

COUNTLOG file: (%1)

COBOL: (%2)

[Description]

There is a difference in the line number of PROCEDURE DIVISION between a COUNTLOG file and COBOL.

%1: File name and line number of the COUNTLOG file

%2: Line number of COBOL

[Corrective Action]

The programs may not be those of the target. Specify the correct source file.

When a program is changed, create a new COUNTLOG file using Accumulation.

Or, the option (NUMBER/NONUMBER) specified at the time of compilation may differ from the accumulation mode specified when accumulating COUNTLOG files.

Check the compile option and the accumulation mode.

10037 The CSV file is not specified.

[Description]

No CSV file has been specified.

[Corrective Action]

Specify a CSV file.

10038 The program for viewing CSV files is not specified.

[Description]

The CSV file created using [Form Output](#) cannot be displayed because a CSV file viewer program has not been specified.

[Corrective Action]

Specify a CSV file viewer program in the [6.10.1 Settings Window](#).

10039 The exclusion statement number direction file is not specified.

[Description]

Unable to open a file because no exclusion statement number direction file has been specified.

[Corrective Action]

Create an exclusion statement number direction file and then perform the operation.

10040 The program for editing exclusion statement number direction files is not specified.**[Description]**

No exclusion statement number direction file editor program has been specified.

Therefore, the exclusion statement number direction file created using [Create the exclusion statement number direction file](#) cannot be displayed.

[Corrective Action]

Specify an exclusion statement number direction file editor program in the [Settings](#).

10041 Failed to start %s.**[Description]**

Starting of a program has failed.

%s: Program name

[Corrective Action]

Check the CSV file viewer program and the exclusion statement number direction file editor program specified in the [Settings](#).

10042 Failed to start Help.(%1)**[Description]**

Starting of the Help has failed.

%1: Path name of the **Help**

[Corrective Action]

Check whether the HELP folder exists under the installation directory.

10043 There is an error in the COUNT information file. Please check the file.**[Description]**

There is an error in a COUNT information file.

[Corrective Action]

Check the COUNT information file.

10044 The file is not a COUNT information file.**[Description]**

The file is not a COUNT information file.

[Corrective Action]

Check the COUNT information file and perform specification again.

**10045 The date of the COUNT information file is incorrect.
Details:(%1)****[Description]**

The date of the COUNT information file is incorrect.

%1: Date

[Corrective Action]

Check the COUNT information file and perform specification again.

10046 Unable to find valid line information in the COUNT information file.**[Description]**

Valid line information was not found in the COUNT information file. There is no line information for a program in the COUNT information file.

[Corrective Action]

Check the COUNT information file and perform specification again.

10047 Unable to find valid program information in the COUNT information file.**[Description]**

Valid program information was not found in the COUNT information file.

There is no information for a program in the COUNT information file.

[Corrective Action]

Check the COUNT information file and perform specification again.

10048 The time of the COUNT information file is incorrect.

Contents:(%1)

[Description]

The time of the COUNT information file is incorrect.

%1: Time

[Corrective Action]

Check the COUNT information file and perform specification again.

10049 An error occurred when opening the COUNT information file.

COUNT information file name:(%1)

Details:(%2)

[Description]

An error occurred when opening a COUNT information file.

%1: Name of the COUNT information file

%2: [Details](#)

[Corrective Action]

Check the COUNT information file and perform specification again.

10050 An error occurred while reading the COUNT information file.

COUNT information file name:(%1)

Details:(%2)

[Description]

An error occurred while reading a COUNT information file.

%1: Name of the COUNT information file

%2: [Details](#)

[Corrective Action]

Check the COUNT information file and perform specification again.

10051 A memory shortage occurred while reading the COUNT information file.**[Description]**

A memory shortage occurred while reading a COUNT information file.

[Corrective Action]

Close any unnecessary applications and then perform the operation again.

10052 An error occurred while parsing the COUNT information file.

[Description]

An error occurred while parsing a COUNT information file.

[Corrective Action]

Check the COUNT information file.

10053 An error occurred while reading the exclusion statement number direction file.

Exclusion statement number direction file:(%1)

Details:(%2)

[Description]

An error occurred while reading an exclusion statement number direction file.

%1: Name of the exclusion statement number direction file

%2: [Details](#)

[Corrective Action]

Check the exclusion statement number direction file and perform specification again.

10059 Please select the defined program.

[Description]

No definition program has been selected.

[Corrective Action]

When accumulating, select one or more definition programs.

10062 The specified file was not an exclusion statement number direction file.

[Description]

The specified file is not an exclusion statement number direction file.

[Corrective Action]

Check the exclusion statement number direction file and perform specification again.

10064 There is a difference between the PROGRAM-ID of the COUNTLOG file and the exclusion statement number direction file.

COUNTLOG file PROGRAM-ID:(%1)

Exclusion statement number direction file PROGRAM-ID:(%2)

Please specify the correct exclusion statement number direction file.

[Description]

The program ID of a COUNTLOG file is different from that of an exclusion statement number direction file.

%1: Program ID of the COUNTLOG file

%2: Program ID of the exclusion statement number direction file

[Corrective Action]

Specify a correct exclusion statement number direction file.

10065 Please specify the correct work folder.**[Description]**

The name specified for the work folder contains invalid characters.

[Corrective Action]

Confirm that the following characters are not used in the work folder name and then perform specification again.

V:*?"<>|

**10066 An error occurred while reading the COBOL source file.
COBOL source file name:(%1)****[Description]**

An error occurred while reading a COBOL source file.

%1: Name of the COBOL source file

[Corrective Action]

Check the specified COBOL source file and perform specification again.

10067 Please specify the COUNTLOG file name.**[Description]**

Specification of a COUNTLOG file is required.

[Corrective Action]

Specify a COUNTLOG file.

10068 Please specify the correct COUNTLOG file name.**[Description]**

There is an error in the specification of a COUNTLOG file.

[Corrective Action]

Check the COUNTLOG file and perform specification again.

**10069 An error occurred while reading the COBOL source file.
Details:(%1)****[Description]**

An error occurred while reading a COBOL source file.

%1: [Details](#)

[Corrective Action]

Check the COBOL source file and perform specification again.

10070 Single output operands and batch output operands cannot be specified simultaneously.**[Description]**

The single output operand (/IF) and batch output operands (/ID, /SD, and /OD) cannot be specified simultaneously.

[Corrective Action]

Check the output format and specify an operand again.

10071 Unable to find the PROGRAM-ID in the COBOL source file.**[Description]**

PROGRAM-ID was not found in the COBOL source file.

[Corrective Action]

Confirm that the COBOL source file contains PROGRAM-ID and perform specification again.

10072 An error occurred while opening the COBOL source file.

Details:(%1)

[Description]

An error occurred when opening a COBOL source file.

%1: [Details](#)

[Corrective Action]

Check the COBOL source file and perform specification again.

10073 An error occurred while reading the COUNTLOG file.

Details:(%1)

[Description]

An error occurred while reading a COUNTLOG file.

%1: [Details](#)

[Corrective Action]

Check the COUNTLOG file and perform specification again.

10074 An error occurred while reading the COUNTLOG file.

Details:(%1)

[Description]

An error occurred while reading a COUNTLOG file.

%1: [Details](#)

[Corrective Action]

Check the COUNTLOG file and perform specification again.

10075 An error occurred when opening the COUNTLOG file.

Details:(%1)

[Description]

An error occurred when opening a COUNTLOG file.

%1: [Details](#)

[Corrective Action]

Check the COUNTLOG file and perform specification again.

10076 Unable to find the exclusion statement number direction file.

[Description]

There is an error in the specification of an exclusion statement number direction file.

[Corrective Action]

Check the exclusion statement number direction file and then perform the operation again.

10077 Please specify the correct storage folder for the exclusion statement number direction file.

[Description]

There is an error in the specification of the storage folder of exclusion statement number direction files.

[Corrective Action]

Check the storage folder of exclusion statement number direction files and then perform the operation again.

10078 Unable to find the exclusion statement number direction file information from the COUNTLOG file.

[Description]

There is no information on an exclusion statement number direction file in the specified COUNTLOG file.

[Corrective Action]

Check the contents of the COUNTLOG file and perform specification again.

Or, specify the full path of an exclusion statement number direction file after the command line option /EX.

10079 Unable to find the exclusion statement number direction file described in the COUNTLOG file.

[Description]

The exclusion statement number direction file described in a COUNTLOG file was not found.

[Corrective Action]

Check whether the described exclusion statement number direction file exists in the COUNTLOG file.

10080 A memory shortage occurred while reading the exclusion statement number direction file read.

[Description]

A memory shortage occurred while reading an exclusion statement number direction file.

[Corrective Action]

Close any unnecessary applications and then perform the operation again.

10081 Unable to find the work folder.

[Description]

The work folder was not found.

[Corrective Action]

Check whether the work folder exists and then perform the operation again.

10082 Please specify the character code of the correct COBOL source file.

[Description]

There is an error in the specification of the character code of a COBOL source file.

[Corrective Action]

/IS and /IU cannot be specified at the same time.

Check the character code of the COBOL source file and perform specification again.

10083 Please specify the character code of the correct output CSV file.

[Description]

There is an error in the specification of the character code of a CSV file.

[Corrective Action]

/OS and /OU cannot be specified at the same time.

Check the character code of the CSV file and perform specification again.

10084 Please specify the correct output form type.

[Description]

There is an error in the specification of the output form type.

[Corrective Action]

/MR and /MK and /TI cannot be specified at the same time.

Specify a correct output form type.

10085 Single output operands and batch output operands cannot be specified simultaneously.

[Description]

Single output operands (/IF, /SF, or /OF) and the batch output operand (/ID) cannot be specified simultaneously.

[Corrective Action]

Check the output format and specify an operand again.

10086 Unable to find the COBOL source.

[Description]

The COBOL source was not found.

[Corrective Action]

Specify a COBOL source file and then perform the operation again.

10087 Failed to create the output CSV file name.

[Description]

Creation of an output CSV file name has failed.

There is an error in the full path of the CSV file described in a COUNTLOG file.

[Corrective Action]

Check the contents of the COUNTLOG file, or specify the full path of an output CSV file in the command line.

10088 Please specify the output form type.

[Description]

Specification of an output form type (/MR, /MK, or /TI) is required.

[Corrective Action]

Specify an output form type.

10089 %1 is an invalid option.

[Description]

An invalid option has been specified.

%1: Option name

[Corrective Action]

For available options, refer to [5.7 Command Line](#) in the user's guide.

10090 The length of the test case name(%1) exceeds 255 bytes.

[Description]

The length of a test case name has exceeded 255 bytes.

%1: Test case name

[Corrective Action]

Check the test case name and perform specification again.

10091 There is COBOL source with the same program name.

[Description]

When performing batch output, COBOL source with the same program name already exists in the specified COBOL source storage folder.

[Corrective Action]

Check the COBOL source and then perform the operation again.

**10092 An error occurred while parsing the COBOL source file.
COBOL source file name:(%1)**

An error occurred while parsing a COBOL source file.

%1: Name of the COBOL source file

[Corrective Action]

Check the COBOL source file.

10093 Please specify the correct output CSV file storage folder.

[Description]

The output CSV file storage folder is incorrect.

[Corrective Action]

Specify the correct output CSV file storage folder again.

10094 Please specify the correct COBOL source file storage folder.

[Description]

The COBOL source file storage folder is incorrect.

[Corrective Action]

Specify the correct COBOL source file storage folder again.

**10095 An error occurred when creating the output log file.
File:(%1)**

[Description]

An error occurred when creating an output log file.

%1: File

[Corrective Action]

Check the path of the output log file.

10096 The specified test case name was not found in the COUNTLOG file.

[Description]

When specifying individual execution instruction information output, the specified test case name does not match the test case name described in a COUNTLOG file.

[Corrective Action]

Check the COUNTLOG file and specify a test case name again.

10097 There are no test cases in the COUNTLOG file.

[Description]

Although individual execution instruction information output was specified, there is no test case name in the specified COUNTLOG file.

[Corrective Action]

Check the COUNTLOG file and then perform the operation again.

10098 Please specify the COUNTLOG file storage folder.

[Description]

Specification of a COUNTLOG file storage folder is required.

[Corrective Action]

Specify a COUNTLOG file storage folder.

**10099 An error occurred when creating the CSV file output folder.
Folder: (%1)**

[Description]

An error occurred when creating a CSV file output folder.

%1: Folder path

[Corrective Action]

Check the CSV file output folder.

10100 The length of the COUNTLOG file name (%1) exceeds 255 bytes.

[Description]

The length of a COUNTLOG file name has exceeded 255 bytes.

%1: COUNTLOG file name

[Corrective Action]

Check the COUNTLOG file storage folder and perform specification again.

10101 The length of the COUNT information file name (%1) exceeds 255 bytes.

[Description]

The length of a COUNT information file name has exceeded 255 bytes.

%1: Name of the COUNT information file

[Corrective Action]

Check the COUNT information file name and perform specification again.

10102 The length of the COBOL source file name (%1) exceeds 255 bytes.

[Description]

The length of a COBOL source file name has exceeded 255 bytes.

%1: Name of the COBOL source file

[Corrective Action]

Check the COBOL source file name and perform specification again.

10104 The length of the exclusion statement number direction file name (%1) exceeds 255 bytes.

[Description]

The length of an exclusion statement number direction file name has exceeded 255 bytes.

%1: Name of the exclusion statement number direction file

[Corrective Action]

Check the exclusion statement number direction file name and perform specification again.

10105 The length of the CSV file name(%1) exceeds 255 bytes.

[Description]

The length of a CSV file name has exceeded 255 bytes.

%1: CSV file name

[Corrective Action]

Check the CSV file name and perform specification again.

10106 The length of the folder name (%1) exceeds 255 bytes.

[Description]

The length of a folder name has exceeded 255 bytes.

%1: Folder name

[Corrective Action]

Check the folder name and perform specification again.

10107 The length of the file name (%1) exceeds 255 bytes.

[Description]

The length of a file name has exceeded 255 bytes.

%1: File name

[Corrective Action]

Check the file name and perform specification again.

**10108 Please input the test case name using up to 255 bytes.
Program name:(%1)**

[Description]

The length of a test case name has exceeded 255 bytes.

%1: Program name

[Corrective Action]

Check the test case name and perform specification again.

**10109 An error occurred when opening the output log file.
File:(%1)
Details:(%2)**

[Description]

An error occurred when opening an output log file.

%1: Path name of the log file

%2: [Details](#)

[Corrective Action]

Check the output log file and perform specification again.

10110 An error occurred while writing to the output log file.

File:(%1)

Details:(%2)

[Description]

An error occurred while writing to an output log file.

%1: Path name of the log file

%2: [Details](#)

[Corrective Action]

Check the output log file and perform specification again.

10111 The storage folder of the COUNTLOG file is not specified.

[Description]

Specification of a COUNTLOG file storage folder is required.

[Corrective Action]

Specify a COUNTLOG file storage folder.

10112 The COUNT information file is not specified.

[Description]

Specification of a COUNT information file is required.

[Corrective Action]

Specify a COUNT information file.

10113 The COUNT information file (%1) does not exist.

[Description]

The specified COUNT information file does not exist.

%1: Path name of the COUNT information file

[Corrective Action]

Check the path to the COUNT information file and perform specification again.

10114 The test case name does not exist in the COUNTLOG file.

[Description]

A test case name cannot be specified because there are no test case names in an existing COUNTLOG file.

[Corrective Action]

Delete the specified test case name and then perform the operation again.

10115 The test case name already exists in the COUNTLOG file.

[Description]

Specification of a test case name is required because a test case name exists in an existing COUNTLOG file.

[Corrective Action]

Check the existing COUNTLOG file and specify again.

10300 Unable to find the current folder(%1).

[Description]

The current folder was not found.

%1: Current folder name

[Corrective Action]

Check the current folder and perform specification in the [Settings](#) again.

10301 Unable to find the work folder(%1).

[Description]

The work folder was not found.

%1: Work folder name

[Corrective Action]

Check the work folder and perform specification in the [Settings](#) again.

10302 Unable to find the program(%1) for viewing CSV files.

[Description]

The CSV file viewer program was not found.

%1: Name of the CSV file viewer program

[Corrective Action]

Check the CSV file viewer program and perform specification in the [Settings](#) again.

10303 Unable to find the program (%1) for editing exclusion statement number direction files.

[Description]

The exclusion statement number direction file editor program was not found.

%1: Name of the exclusion statement number direction file editor program

[Corrective Action]

Check the exclusion statement number direction file editor program and perform specification in the [Settings](#) again.

10400 The folder(%1) cannot be specified.

[Description]

An invalid folder name has been specified.

%1: Folder name

[Corrective Action]

Specify a folder again.

10401 The file(%1) cannot be specified.

[Description]

An invalid file name has been specified.

%1: File name

[Corrective Action]

Specify a file again.

10402 Unable to find the folder(%1).

[Description]

The specified folder was not found.

%1: Folder name

[Corrective Action]

Specify a folder again.

10403 Unable to find the file(%1).

[Description]

The specified file was not found.

%1: File name

[Corrective Action]

Specify a file again.

10404 The root folder of the drive(%1) cannot be specified.

[Description]

The root directory of a drive cannot be specified as an output destination for files.

%1: Folder name

[Corrective Action]

Specify a folder.

10405 The COBOL source file (%1) was not found. Specify the correct COBOL source file in the Main dialog after the COUNTLOG file is displayed.

[Description]

The COBOL source file described in a COUNTLOG file was not found.

%1: File name

[Corrective Action]

Check whether the COBOL source file specified in the COUNTLOG file exists, and perform specification again in the Main dialog.

10406 The exclusion statement number direction file (%1) was not found. Specify the correct exclusion statement number direction file in the Main dialog after the COUNTLOG file is displayed.

[Description]

The exclusion statement number direction file specified in a COUNTLOG file was not found.

%1: File name

[Corrective Action]

Check whether the exclusion statement number direction file specified in the COUNTLOG file exists, and perform specification again in the Main dialog.

10500 The format of the COUNTLOG file is not supported.

[Description]

An unsupported COUNTLOG file has been specified.

[Corrective Action]

Specify a supported COUNTLOG file.

12008 Please specify the correct source library name.**[Description]**

There is an error in the specification of a source library name.

[Corrective Action]

Specify the correct source library name.

12009 Please specify the correct exclusion statement number direction file.**[Description]**

There is an error in the specification of an exclusion statement number direction file name.

[Corrective Action]

Specify a correct exclusion statement number direction file name.

12011 Please specify the correct CSV file name.**[Description]**

There is an error in the specification of an output CSV file name.

[Corrective Action]

Specify a correct output CSV file name.

12012 Please specify the correct COBOL source file name.**[Description]**

There is an error in the specification of a COBOL source file name.

[Corrective Action]

Specify the correct COBOL source file name.

13000 An internal error occurred.

Details : %1

[Description]

An error occurred in an internal process.

%1: [Details](#)

[Corrective Action]

Check the specified files or folders again.

13001 An error occurred in the work folder (%1).

Details:%2

[Description]

An error occurred in a work folder.

%1: Folder name

%2: [Details](#)

[Corrective Action]

Check the specified work folder again.

13002 An error occurred. Please select the correct file.**[Description]**

There is an error in the specification of a COBOL source file.

[Corrective Action]

Specify the correct COBOL source file.

20000 Line specification error

Unable to find the specified line number.

Please specify the correct line number.

[Description]

Line specification error

The specified line number was not found.

[Corrective Action]

Specify the correct line number.

Message Details

ID	Messages	Description and Corrective Action
11000	No errors	The operation of terminals may become unstable. Close the application and then perform the operation again.
11001	Undefined error	An unidentified error occurred. Check the specified file and then perform the operation again.
11002	Undefined file	The file was not found. Check the specified file and then perform the operation again.
11003	Incorrect path	The path name is invalid. Check the specified file and then perform the operation again.
11004	Too many open files	Processing cannot be performed because many files are currently open. Close any unnecessary applications and then perform the operation again.
11005	File access denied	Accessing of the file has failed. Check the attributes of the specified file and then perform the operation again.
11006	Invalid file handle used	An invalid file handle was used. Check the specified file and then perform the operation again. Or, close any unnecessary applications and then perform the operation again.

11007	The current working directory cannot be deleted	The current directory being used cannot be deleted. Check the specified current directory and then perform the operation again.
11008	The directory is full	The directory is full. Delete any unnecessary files in the specified directory and then perform the operation again.
11009	File pointer setting error	There is an error in the setting of a file pointer. Check the specified file and then perform the operation again. Or, close any unnecessary applications and then perform the operation again.
11010	Hardware error	A hardware error has occurred. There is a possibility that the hardware of a terminal has been damaged. Check the status of terminals and then perform the operation again.
11011	Sharing violation	A sharing violation has occurred. Check that the specified file is not being opened by another application and then perform the operation again.
11012	Lock requested for already locked area	The locked area is locked. Check that the specified file is not being opened by another application and then perform the operation again.
11013	The disk is full	There is not enough disk space available. Delete unnecessary files or specify another drive, and then perform the operation again.
11014	The end of the file has been reached	The end of the file was reached while reading. The file may have been damaged. Check the specified file and then perform the operation again.
		The operation of terminals may

12000	No errors	become unstable. Close the application and then perform the operation again.
12001	Undefined error	An unidentified error occurred. Check the specified file and then perform the operation again.
12002	Write to the file for input	Writing to a file opened for input was attempted. Check the specified file and then perform the operation again.
12003	The end of the file has been reached	The end of the file was reached while reading. The COUNTLOG file may have been damaged. Create a new COUNTLOG file again using Accumulation.
12004	Read the output file	Reading from a file opened for output was attempted. Check the specified file and then perform the operation again.
12005	File format error	The file format is incorrect. Check the specified file and then perform the operation again.
12006	File format error	The file format is incorrect. Check the specified file and then perform the operation again.
12007	File format error	The file format is incorrect. Check the specified file and then perform the operation again.

2.1 Features of TF-EXCOUNTER

TF-EXCOUNTER has the following features.

1. **Omission of tests can be eliminated by evaluating the test results from the structural viewpoint**

By evaluating the program test results from the structural viewpoint, and displaying the unexecuted instructions, it is possible to confirm the section for which tests were omitted. This means that based on the confirmation results, test omission can be eliminated by adding test cases that pass through the unexecuted instructions.

2. **Functional tests and structural tests can be executed simultaneously**

Execution information can be obtained without changing the source program. Therefore, it is possible to obtain instruction execution coverage while executing the functional test.

3. **Targets of instruction execution coverage measurement can be narrowed down**

When limiting the test range, it is possible to exclude the statements not to be tested from the targets of measurement of instruction execution coverage.

4. **Measurement without using test cases is possible**

When using this tool without consideration of test cases, the mode without test cases can be used. However, execution information for each test case cannot be output. Therefore, it is only material for delivery and cannot be used as verification materials of each test case.

2.2 Timing for Applying TF-EXCOUNTER

This section explains the test phases to which TF-EXCOUNTER can be effectively applied. There are the following three timings for testing.

- 1. Application after all test cases are complete**

After completing all test cases, execute the same test cases again to measure instruction execution coverage.

- 2. Application during testing, after the frequency of source modification decreases**

When source modification occurs, perform a regression test and then advance to the next test case.

It is recommended that application is performed after the core logic test is completed. This is because if modification of the core logic is performed, it affects a number of test cases, and a lot of rework is necessary.

- 3. Application from the beginning of testing and creating a new COUNTLOG file when source modification occurs**

Apply from the beginning of testing, and when source modification occurs, create a new COUNTLOG file in order to continue testing. After all test cases are completed, execute only the test cases that were executed before the last source modification again.

[Chapter 3 Installation Procedure](#) > 3.1 Installation and Uninstallation

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3.1 Installation and Uninstallation

For installation and uninstallation of TF-EXCOUNTER, refer to the Software Release Guide provided with the product.

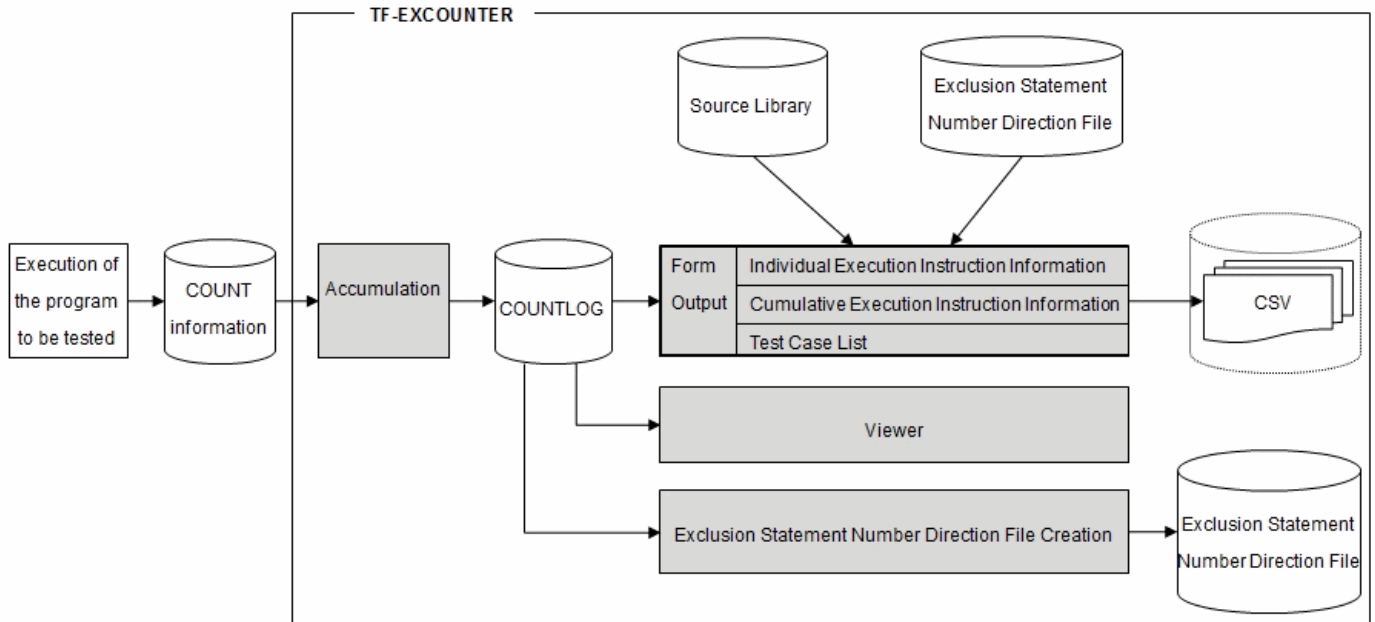
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4.1 Function List of TF-EXCOUNTER

The overall structure of this product is shown below.



No.	Function	Functional Overview
1	Accumulation	Accumulates the information required for measuring instruction execution coverage from the COUNT information output from COBOL at the time of execution of the program to be tested, and stores it in the COUNTLOG file.
2	Individual Execution Instruction Information	Outputs the run times of each instruction of the program to be tested, by consulting individual test cases with the COBOL source. (CSV format file)
3	Cumulative Execution Instruction Information	Cumulates the run times of all test cases by instruction unit and outputs by consulting the COBOL source. (CSV format file)
4	Test Case List	Outputs the instruction execution coverage against the total number of instructions of each test case into a CSV file.
5	Viewer	Displays the COBOL source file and the run times.
6	Exclusion Statement Number Direction File Creation Function	Outputs the information for narrowing down the measurement target of instruction execution coverage. It automatically extracts the unexecuted lines from the COUNTLOG file and outputs them in exclusion statement number direction files. The exclusion reasons described by users are output in "2. Individual Execution Instruction Information", "3. Cumulative Execution Instruction Information", and "5. Viewer".

4.2 Usage of Forms

The usage of forms is shown below.

Form	Test Case		Usage
	With	Without	
Individual Execution Instruction Information	Yes	No	<p>Confirm the paths executed on each test case, and use them as information for debugging.</p> <ul style="list-style-type: none"> • Confirm execution paths using executed lines, unexecuted lines, and run times • Execution as regression by comparing the number of deleted lines and inserted lines <ul style="list-style-type: none"> ◦ Whether there is any impact on test cases can be confirmed. ◦ There is no deletion or insertion for the test cases that are not affected. When modified lines are assumed to be comments, and comment lines are assumed to be additional lines, the number of deleted lines become equal to that of added lines.
Cumulative Execution Instruction Information	Yes	Yes	<p>Outputs the cumulative results of all test cases as material for delivery.</p> <ul style="list-style-type: none"> • Confirm the execution paths of the entire program • Confirm the consistency between excluded lines and reasons for their exclusion • Confirm the sufficiency of tests based on instruction execution coverage

Test Case List	Yes	No	<p>Output the execution information of each test case as supplementary documentation for delivery.</p> <ul style="list-style-type: none">• Confirm the execution consistency of each test case• Comparison between the last source modification date and the test case execution date
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5.1 Starting and Stopping

This section explains how to start and stop TF-EXCOUNTER.

How to Start

Start "SIMPLIA TF-EXCOUNTER(COBOL)" from the start menu.

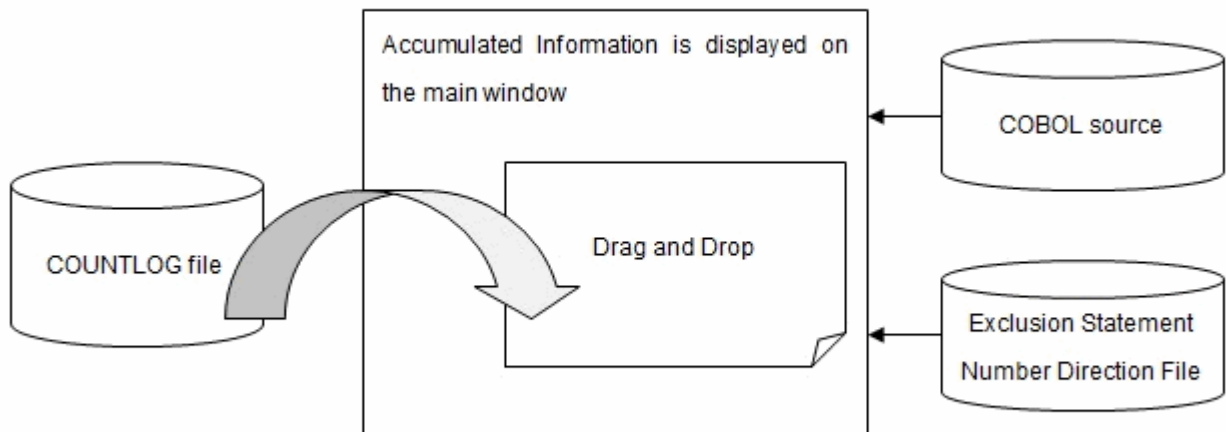
How to Stop

To stop TF-EXCOUNTER, select "Exit SIMPLIA TF-EXCOUNTER(X)" from the "File(F)" menu. When data has been changed, a confirmation message asking whether to save the changes is displayed.

5.9 Drag and Drop

Drag and drop the COUNTLOG files onto the main window, Accumulated Information can be displayed.

1) Function configuration



2) Operation procedure of Drag and Drop

Drag and drop the COUNTLOG files onto the main window, Accumulated Information is displayed.

Note



When several files are dragged:

When dragging several COUNTLOG files selected (reversed) on the explorer, only one active (cursor indicating) file is displayed.

[Chapter 6 User Interface](#) > 6.1 Menu (Main Window)

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6.1 Menu (Main Window)

This section explains the menus on the main window.

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6.10.1 Settings Window

Settings

Set the basic information.

Current Folder(N): (1)
 (2) Browse(D)...

Work Folder(W): (3)
 (4) Browse(T)...

CSV File Viewer Program(C): (5)
 (6) Browse(V)...

Exclusion Statement Number Direction File Editor Program(E):
 (7) (8) Browse(F)...

Character Code Settings

COBOL Source File(S): (9)

COUNT Information File(I): (10)

Output File(O): (11)

(12) OK (13) Cancel (14) Help

No.	Item	Settings
(1)	Current Folder(N)	Specify the current folder that will be applied when a file name is specified without the folder name on each window. This can only be specified using the Browse button.
(2)	Browse(D)	Clicking this button displays the folder selection dialog box. Specify the current folder from the folder selection dialog box.
		Specify the folder in which the file

(3)	Work Folder(W)	temporarily used by TF-EXCOUNTER is to be created. The folder name specified in the environment variable "TEMP" is displayed by default.
(4)	Browse(T)	Clicking this button displays the folder selection dialog box. Specify a work folder from the folder selection dialog box.
(5)	CSV File Viewer Program(C)	Specify a program for viewing CSV files. The program must be a spreadsheet program that can display the CSV file format. When a display program is specified, selecting "Open CSV File" from the File menu opens the CSV file created using the Form Output function .
(6)	Browse(V)	Clicking this button displays the file selection dialog box. Specify a CSV file viewer program using the file selection dialog box.
(7)	Exclusion Statement Number Direction File Editor Program(E)	Specify a program for editing exclusion statement number direction files. The program must be able to edit text files. When an editing program is specified, selecting "Open Exclusion Statement Number Direction File" from the File menu opens the exclusion statement number direction file created using the Exclusion Statement Number Direction File Creation function .
(8)	Browse(F)	Clicking this button displays the file selection dialog box. Specify a program for editing exclusion statement number direction files using the file selection dialog box.
(9)	COBOL Source File(S)	Specify the character code of the COBOL source file. Specify the character code of the COBOL source file to use.
(10)	COUNT Information File(I)	Specify the character code of a COUNT information file. Specify the character code of the COUNT information file to use.
		Specify the character code for the output CSV file and exclusion statement number

(11)	Output File(O)	direction file. Files are output using the specified character code. As for exclusion statement number direction files, the character code is also used at the time of input.
(12)	OK	Click when saving the set information.
(13)	Cancel	Click when not saving the set information.
(14)	Help	Clicking this displays the user's guide.

Note



Regarding Work Folder

Do not specify the root directory of a drive as a work folder.



Regarding setting items

Set all items using their full path.

UNC names cannot be used. Only the physical drive of a local computer or a network drive can be specified.

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[Chapter 7 Output File Explanation](#) > 7.1 Form Output (CSV File)

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7.1 Form Output (CSV File)

This section explains the forms (CSV files) that are output using Form Output.

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7.2 Exclusion Statement Number Direction File Explanation

Exclusion statement number direction files are created using text files.

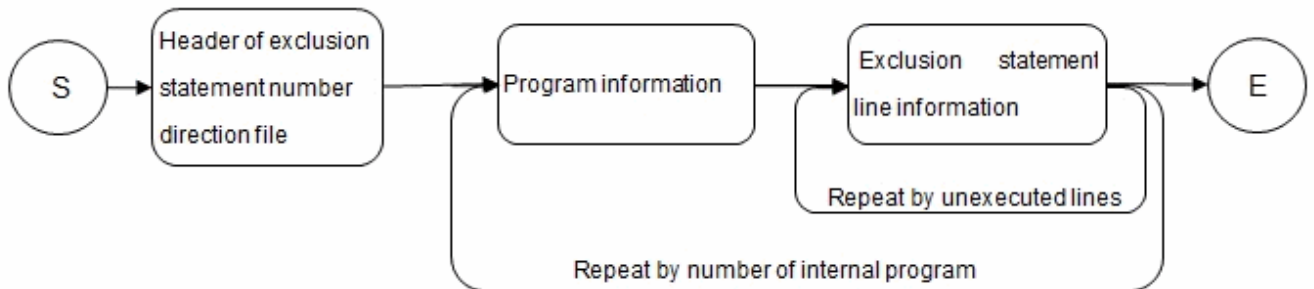


Table 7.20 Header of exclusion statement number direction file

No.	Value	Settings
1	SIMPLIA TF- EXCOUNTER△Exclusion statement number direction file	The identification record of exclusion statement number direction files. Other formats are not valid for exclusion statement number direction files. The underscore (△) indicates a blank space.

Table 7.21 Program information

No.	Value	Settings
1	*****[Program]*****	For COBOL, specify a program name for <i>Program</i> . Other formats are not valid for exclusion statement number direction files.

Table 7.22 Exclusion statement line information

No.	Value	Settings
1	<i>nnnnnnExclusion reason</i>	Specify a six-digit line number for <i>nnnnnn</i> . Specify the exclusion reason for <i>Exclusion reason</i> . Other formats are not valid for exclusion statement number direction files.

Example of an exclusion statement number direction file

When setting "For error handling" for the exclusion reason of line 222 of the program "JYUCHU"

Example:

```
SIMPLIA TF-EXCOUNTER Exclusion statement number direction file
*****[JYUCHU]*****
000222For error handling
```

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8.1 Restrictions and Advisory Notes

1. Prerequisite

- All programs to be measured must be compiled with the COUNT option.

2. Restrictions and Advisory Notes

- When NUMBER is specified for the accumulation mode of Accumulation, the line numbers in the source program must be assigned in ascending order.
- INCLUDE statements cannot be used in PROCEDURE DIVISION. They are disregarded.
- For COPY statements in PROCEDURE DIVISION, the source information is not displayed in forms. In addition, on the Viewer display, COPY statements are disregarded.
- COBOL source files must include PROGRAM-ID and PROCEDURE DIVISION. Do not perform declaration in COPY phrases.
- Do not describe two or more words of execution instructions (such as IF and MOVE), CONTINUE, EXIT, and procedure identifiers, in a single line. The second and subsequent instruction words are disregarded.
- If renumbering is performed on the source program during instruction execution coverage measurement before all test cases are measured, the accuracy of results is not guaranteed. In that case, create a new COUNTLOG file for the program.
- For COBOL, classes and methods cannot be measured.
- For COBOL, the program format must be FIX or VAR. Operation with FREE is not possible.
- Exclusion statement number direction files and the CSV files output using form output are overwritten.
- In the following case, a date and time earlier than the last date of the accumulated COUNT information file and the last time of the accumulated COUNT information file are accumulated.
 - When accumulating a COUNT information file older than the first date or first time of the accumulated COUNT information file
- When the run times of all instructions are zero, even when form output is performed using an exclusion statement number direction file, the instruction execution coverage will be 0%.
- Do not specify the root directory of a drive as the work folder that is specified in the Settings.
- When measuring the coverage of programs using COBOL advanced options, the supported character codes for COUNT information and the source program are Shift-JIS and UTF-8.

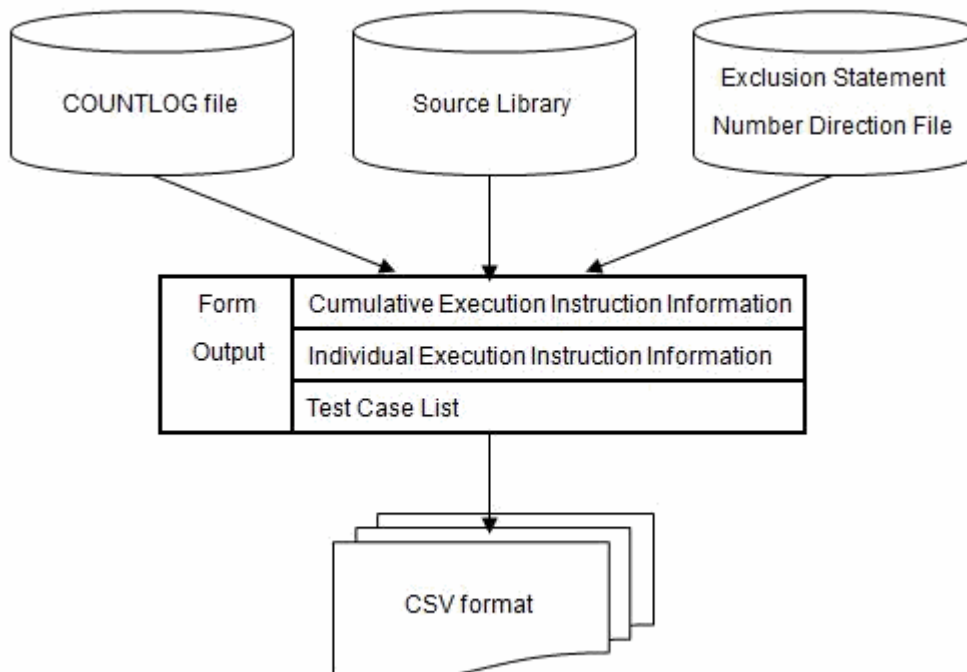
- The PROCEDURE DIVISION declaration and PROGRAM-ID must be described in a single line.
- When a keyword of PROCEDURE DIVISION exists in annotation such as AUTHOR of the identification division, the source contents will be output in the Viewer or forms.
- When the size of the COUNT information file that is output by COBOL exceeds 2 GB, accessing of the file may fail.
- The character code specified in the Settings window must be the same as that of files that are used.
- When the character code of input files is UTF-8, characters with codes other than Shift-JIS will be output to output files after being converted into "?" (alternative characters).
- When characters displayed using four-byte codes as specified in JIS2004 are used, this product does not operate correctly.
 - When such characters are entered in the input fields
 - When a folder or file with a name using such characters is selected
- When an exclusion reason longer than 512 bytes is described in an exclusion statement number direction file, in the Viewer or forms only the first 512 bytes are displayed.
- SIMPLIA TF-EXCOUNTER cannot handle the path which is over 255 bytes.
- When a line break code other than CR+LF is used in input files, it does not operate correctly.
- When performing form output using the form output command, the character code of the exclusion statement number direction file is automatically identified. However, the supported character codes are Shift-JIS and UTF-8 with BOM.

5.5 Form Output

TF-EXCOUNTER is able to output forms in CSV format by editing the COUNTLOG file information. There are the three following types of forms.

Form Name	Overview
Cumulative Execution Instruction Information	Creates forms along with source code by accumulating the information of all test cases.
Individual Execution Instruction Information	Creates forms of the selected test case information along with source code.
Test Case List	Creates forms of the information list of all test cases.

1) Function configuration



2) Operation procedure of the form output function

1. Select "Open COUNTLOG File" from the [file menu](#), or select "Open" from the [Toolbar](#).

2. On the main window, select "Form Output(P)" from the [Command menu](#) or the [Command Bar](#).
3. On the Form Output window, set Form Type, COBOL Source File name, and Output Options, and then click the OK button.
4. The form is output in CSV format.



See

For details on the forms to be output, refer to the following:

[7.1 Form Output \(CSV File\)](#)

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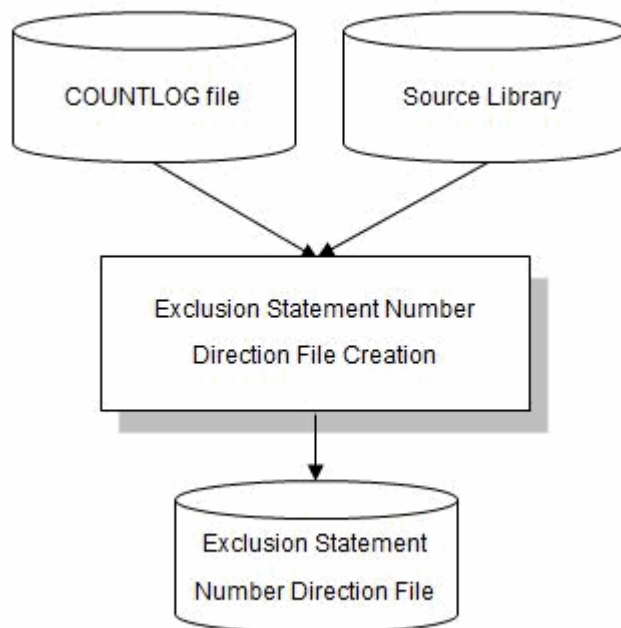
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5.6 Creating an Exclusion Statement Number Direction File

Extracts the unexecuted lines from the COUNTLOG file and the source program and outputs them in exclusion statement number direction files.

1) Function configuration



2) Operation procedure for the exclusion statement number direction file creation function

1. Select "Open COUNTLOG File(O)" from the [File menu](#), or select "Open" from the [Toolbar](#).
2. Click the "Exclusion No.(E)" of the [Command menu](#) or the [Command Bar](#).
3. On the Exclusion Statement Number window, set the COBOL Source File name and the Exclusion Statement Number Direction File to output, and then click the OK button.

Information



Regarding Create the exclusion statement number direction file

Create the exclusion statement number direction file outputs the information on exclusion statement lines without setting exclusion reasons. Therefore, set the exclusion reason using a text editor. Exclusion reasons can be up to 512 bytes (256 double-byte characters) long.

 **See**

For the format of the exclusion statement number direction file, refer to the following:

[7.2 Exclusion Statement Number Direction File Explanation](#)

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5.7 Command Line

Explains the Accumulation command and the Form Output command.

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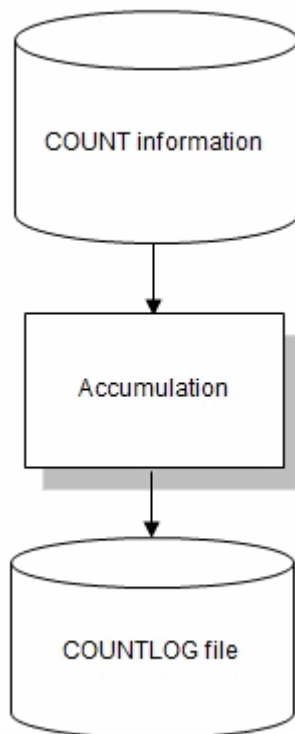
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5.2 Accumulation

Accumulates the information required for measuring instruction execution coverage from the COUNT information output from COBOL at the time of program execution and stores it in the COUNTLOG file.

1) Function configuration



2) Operation procedure of Accumulation

1. Select "New COUNTLOG File" from the file menu, or select "New" from the Toolbar, or select "Accumulation" from the [Command menu](#) or the [Command Bar](#).
2. Configure "Storage Folder of COUNTLOG File" and "COUNT Information File" on the [Accumulation dialog](#), then click the "Next" button.
3. Configure the definition program and detailed information on the [Accumulation Settings dialog](#), then click the "Next" button.
4. Confirm the set information on the [Accumulation Confirmation dialog](#), then click the "Finish" button.





Regarding the Accumulation Mode and Type

Please ensure the Accumulation Mode and Type for the program information to be accumulated are specified correctly.

If specified incorrectly, form output and exclusion statement numbers will not work correctly.



Information



Regarding Test Case Name

Test case names can be specified using up to 255 bytes.



Regarding the COUNTLOG file name

COUNTLOG files are created in the "Storage Folder of COUNTLOG File" specified in the [Accumulation dialog](#).

The file name will be "**Program name.clg**".

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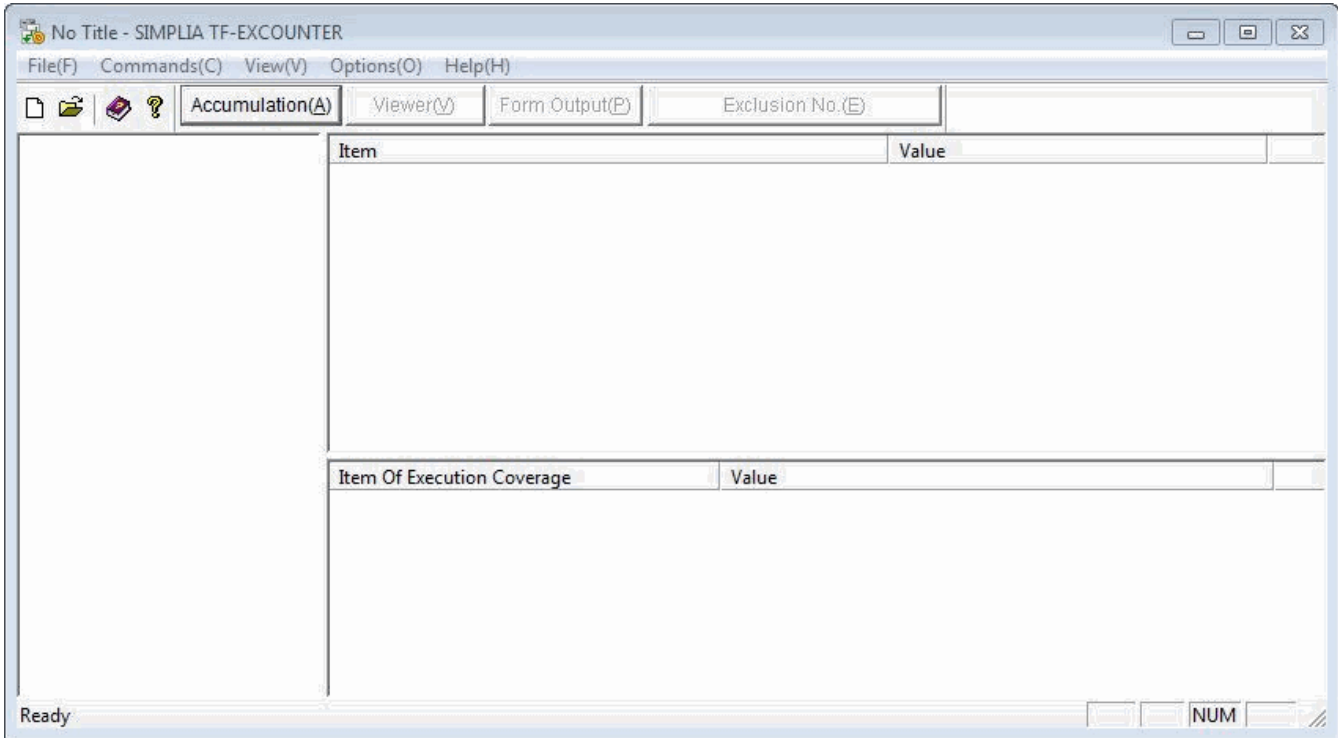
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5.8.2 Operation Procedure of TF-EXCOUNTER

1. Start TF-EXCOUNTER

Start TF-EXCOUNTER.

For information on how to start TF-EXCOUNTER, refer to "[5.1 Starting and Stopping](#)".

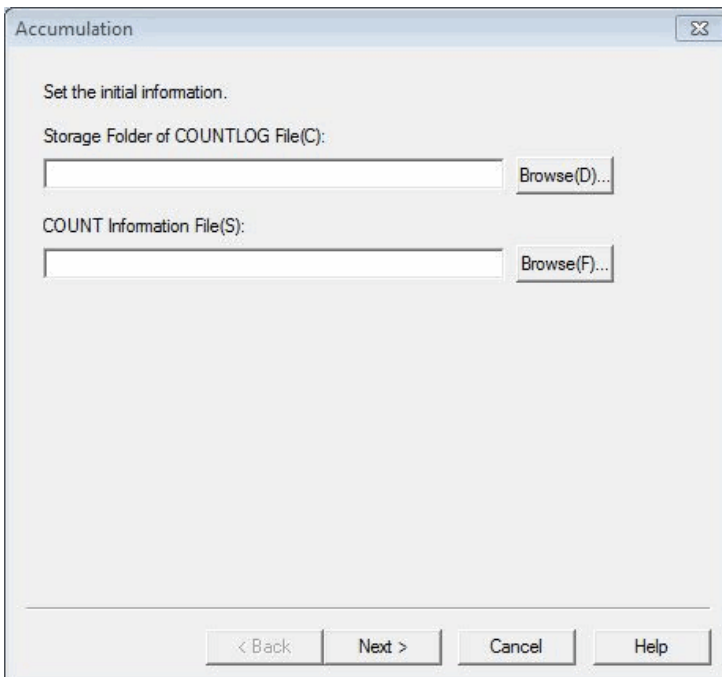


2. Create a COUNTLOG file

On the main window, select "New COUNTLOG File(N)" from the File menu, or select "New" from the Toolbar.

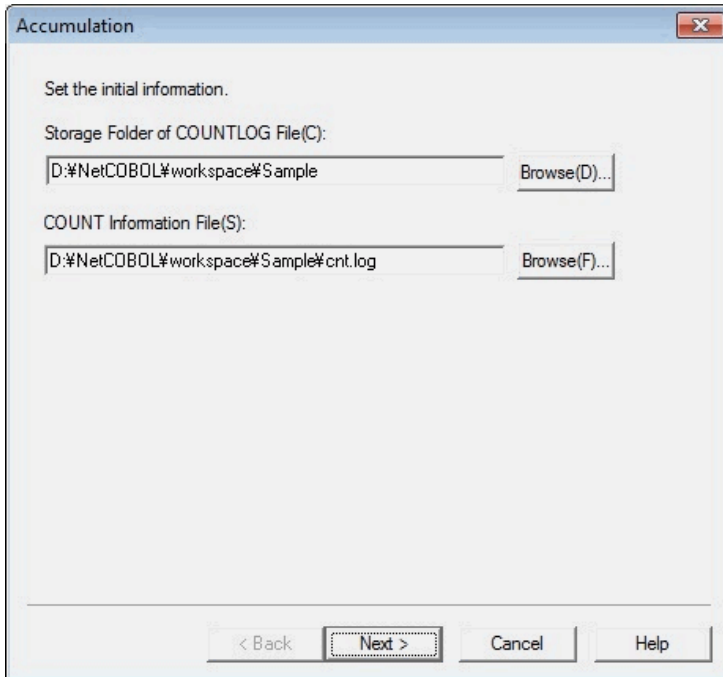
* It is also possible to create a new file by using "Accumulation" that can accumulate the information in existing COUNTLOG files.

Accumulation Dialog



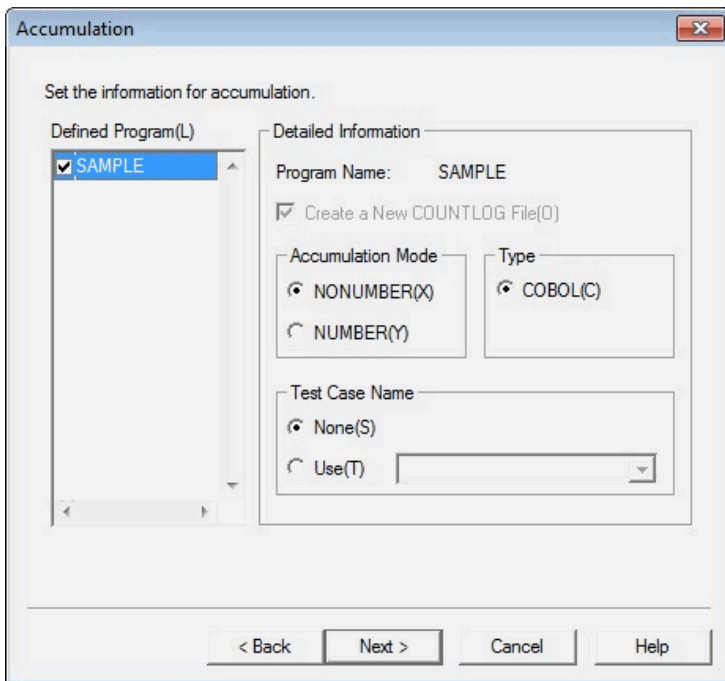
Set the following in the Accumulation dialog, then click the "Next" button.

No.	Name	Settings
1	Storage Folder of COUNTLOG File(C)	Specify the folder in which COUNTLOG files will be created.
2	COUNT Information File(S)	Specify the COUNT information file "cnt.log" that was output from the sample program.

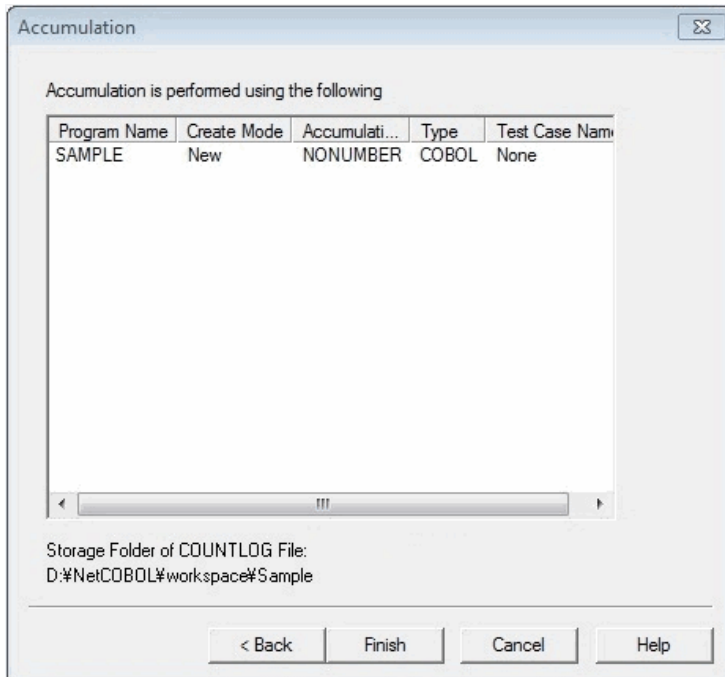


Set the following in the Accumulation Settings dialog, then click "Next".

No.	Name	Settings
1	Defined Program(L)	Check the SAMPLE.
2	Create a New COUNTLOG File(O)	This cannot be specified at the time of new creation. (It is already enabled.)
3	Accumulation Mode	Select "NONUMBER".
4	Type	Select "COBOL".
5	Test Case Name	Select "None".

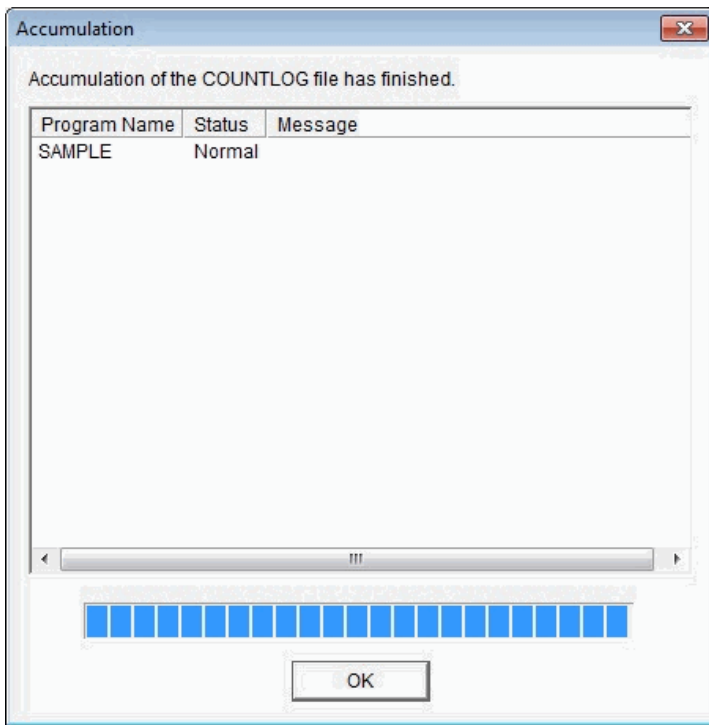


Confirm the set information on the displayed Accumulation Confirmation dialog, then click the "Finish" button.



The Accumulation dialog is displayed.

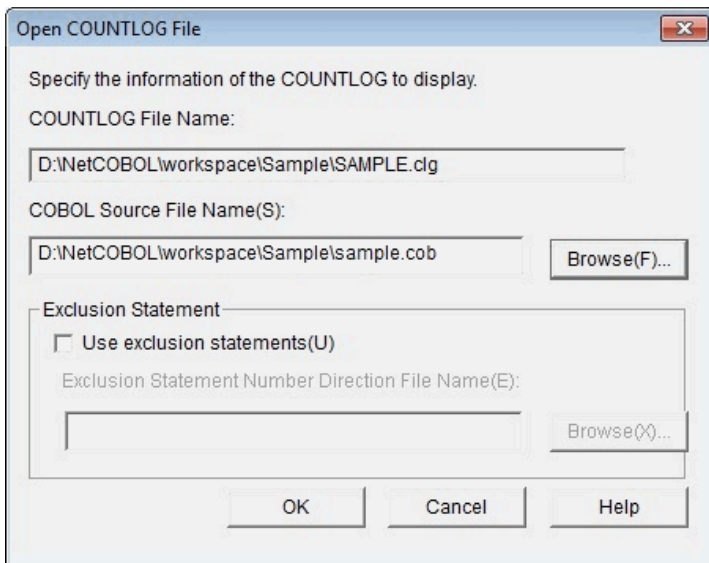
Check that the accumulation has been completed normally, then press the "OK" button.



3. Load the COUNTLOG file

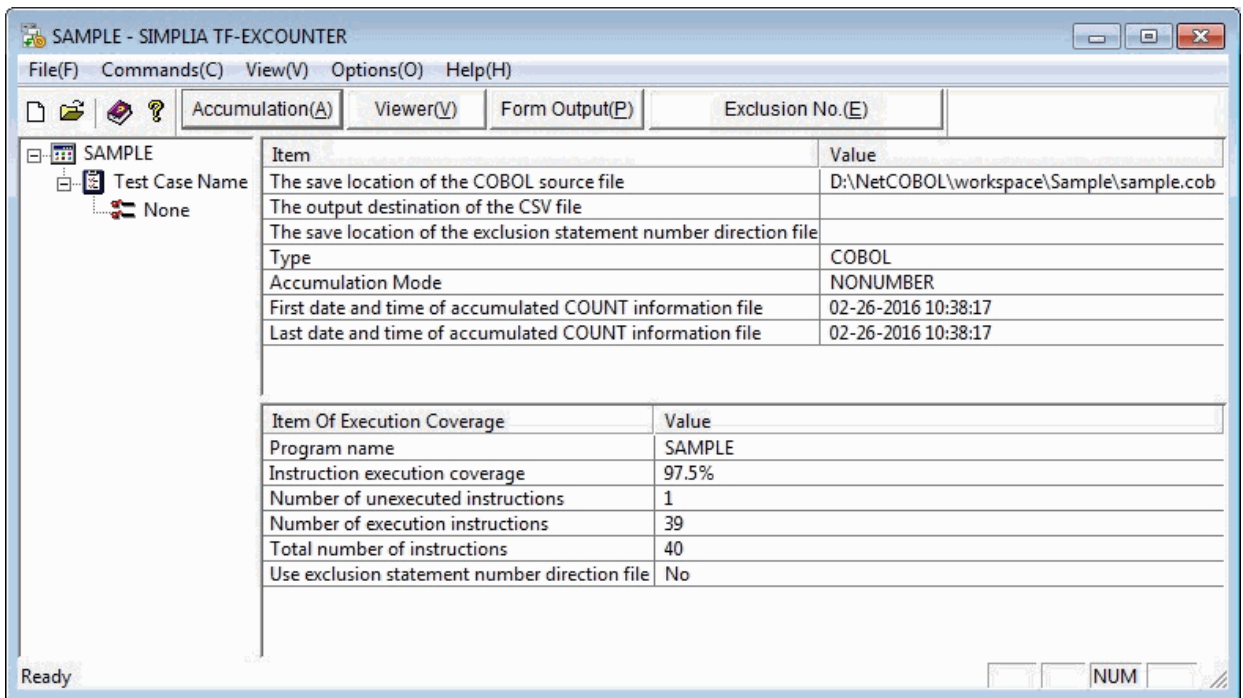
Select "Open COUNTLOG File" from the file menu to select a COUNTLOG file from the file selection window.

Select a COBOL source file from the displayed "Open COUNTLOG File" window.



Clicking the "OK" button displays the information of "SAMPLE.clg".

For details on the display information, refer to ["6.5.1 Main Window"](#).



4. Output the cumulative execution instruction information form

Output the form of the instruction execution coverage of the target program using "Form Output" of the [Command menu](#) or of the [Command Bar](#).

Set the following in the Form Output window, and then click the "OK" button.

No.	Name	Settings
1	Form Type	Select Cumulative Execution Instruction Information.
2	COBOL Source File Name(S)	Specify the COBOL source file name of the sample resource.
3	Output CSV File Name(C)	Specify an output CSV file name.
4	Output simple header information(H)	Remove the check. (Default value)
5	Use exclusion statements(U)	Remove the check. (Default value)

Form Output ✕

Set the information of the form to output.

COUNTLOG File Name:

Form Type

- Cumulative Execution Instruction Information(R)
- Individual Execution Instruction Information(I<)
- Test Case List(I)

COBOL Source File Name(S):

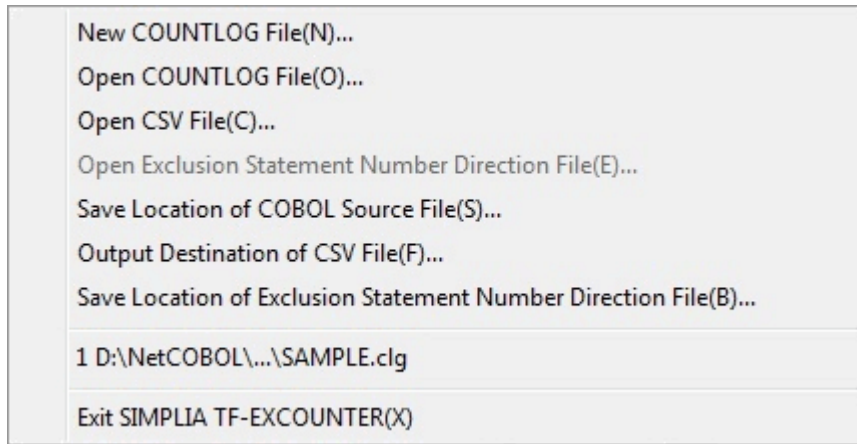
Output CSV File Name(C):

Output Options

- Output simple header information(H)
- Use exclusion statements(U)

Exclusion Statement Number Direction File Name(E):

6.1.1 [File] Menu



No.	Item	Description
1	New COUNTLOG File(N)	Select when creating a new COUNTLOG file.
2	Open COUNTLOG File(O)	Select when opening an existing COUNTLOG file.
3	Open CSV File(C)	Select when opening the most recently created CSV file. A CSV file viewer program must be specified on the Settings Window in advance.
4	Open Exclusion Statement Number Direction File(E)	Select when opening an exclusion statement number direction file. An exclusion statement number direction file editor program must be specified on the Settings Window in advance.
5	Save Location of COBOL Source File(S)	Select when changing the storage location of COBOL source files.
6	Output Destination of CSV File(F)	Select when changing the output destination of CSV files.
7	Save Location of	Select when changing the storage

	Exclusion Statement Number Direction File(B)	location of exclusion statement number direction files.
8	Recent Files	Displays up to five of the most recently used COUNTLOG files.
9	Exit SIMPLIA TF-EXCOUNTER(X)	Ends TF-EXCOUNTER.

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6.10 Settings

This section explains the Settings window.

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7.1.1 Cumulative Execution Instruction Information

Table 7.1 [Original Header Section]

[Product Name]	[Form Type]	[Date and Time Created]			
Program Name	First date of the accumulated COUNT information file	First time of the accumulated COUNT information file	Last date of the accumulated COUNT information file	Last time of the accumulated COUNT information file	COBOL Source File

No.	Edit Item	Details of Editing
1	Product Name	Edit the product name.
2	Form Type	Edit the form type.
3	Date and time created	Edit the date and time of CSV file creation.
4	Program Name	Edit the program name of the specified COUNTLOG file.
5	First date of the accumulated COUNT information file	Edit the date of the initially accumulated COUNT information.
6	First time of the accumulated COUNT information file	Edit the time of the initially accumulated COUNT information.
7	Last date of the accumulated COUNT information file	Edit the date of the final accumulated COUNT information.
8	Last time of the accumulated COUNT information file	Edit the time of the final accumulated COUNT information.

9	COBOL Source File	Edit the COBOL source file name specified using Form Output.
---	-------------------	--------------------------------------------------------------

Table 7.2 [Simple Header Section]

Form Type	Program Name	Test Case Name	COBOL Source File	Exclusion Statement
-----------	--------------	----------------	-------------------	---------------------

No.	Edit Item	Details of Editing
1	Form Type	Edit the form type of the output form.
2	Program Name	Edit the program name of the specified COUNTLOG file.
3	Test Case Name	Edit the test case name output using Form Output. For Cumulative Execution Instruction Information, "-" is displayed for the test case name.
4	COBOL Source File	Edit the COBOL source file name specified using Form Output. Only COBOL source file names are output.
5	Exclusion Statement	Edit the exclusion statement number direction file name specified using Form Output. When exclusion statement information is not specified, "-" is displayed. Only exclusion statement number direction file names are output.

Table 7.3 [Detail Section]

Not Executed Mark	Line Numbers	Source Code	Exclusion Reason	Run Times
-------------------	--------------	-------------	------------------	-----------

No.	Edit Item	Details of Editing
1	Not Executed Mark	Edit the not executed mark based on the cumulative run times. - In the case of an unexecuted line ... X Note: Unexecuted lines are the lines for which the run times is zero after COUNT information is accumulated.
2	Line Numbers	Edit the line numbers of COBOL source files. Only PROCEDURE DIVISION can be edited.

3	Source Code	Edit the source code of COBOL source files. Only PROCEDURE DIVISION can be edited.
4	Exclusion Reason	When an exclusion statement number direction file is specified and is the target of exclusion, edit the exclusion reason so that it begins with "#".
5	Run Times	Edit the cumulative number of run times.

Table 7.4 [Footer Section]

Number of Test Cases	Total Number of Instructions	Number of Execution Instructions	Number of Unexecuted Instructions	Instruction Execution Coverage	Insert Lines	Delete Lines
----------------------	------------------------------	----------------------------------	-----------------------------------	--------------------------------	--------------	--------------

No.	Edit Item	Details of Editing
1	Number of Test Cases	Edit the number of test cases in COUNTLOG.
2	Total number of instructions	Edit the total number of instructions of COBOL source files. Only PROCEDURE DIVISION can be edited and exclusion statements are excluded.
3	Number of execution instructions	Edit the number of executed instructions.
4	Number of unexecuted instructions	Edit the number of unexecuted instructions.
5	Instruction execution coverage	Calculated by dividing Number of execution instructions by Total number of instructions.
6	Insert Lines	Edit the number of insert lines of the accumulated test cases.
7	Delete Lines	Edit the number of delete lines of the accumulated test cases.

 **Information**



1.Regarding Exclusion Statement and Total number of instructions, Number of execution instructions, Number of unexecuted instructions, and Instruction

execution coverage

When "Use exclusion statements" is checked, line numbers directed in exclusion statement number direction files do not become the target of Total number of instructions, Number of execution instructions, or Number of unexecuted instructions.

Therefore, when the line numbers for all unexecuted instructions are directed in an exclusion statement number direction file, the instruction execution coverage will be 100%.

2. The display format at the date and time of creation is the following according to the setting of the region and the language.

[Format]: Japanese	[Display language]: English	YYYY/MM/DD
HH:MM:SS		
	[Display language]: Japanese	YYYY年MM月DD日
HH時MM分SS秒		
[Format]: English	[Display language]: English	MM/DD/YYYY
HH:MM:SS		
	[Display language]: Japanese	MM/DD/YYYY
HH:MM:SS		
[Format]: other than Japanese and English		
	[Display language]: English	MM/DD/YYYY
HH:MM:SS		
	[Display language]: Japanese	YYYY年MM月DD日
HH時MM分SS秒		

The display format of accumulation COUNT first time information File date and final accumulation COUNT information File date is the following.

[Format]: Japanese	[Display language]: English	YYYY-MM-DD HH:MM:SS
	[Display language]: Japanese	YYYY-MM-DD
HH:MM:SS		
[Format]: English	[Display language]: English	MM-DD-YYYY
HH:MM:SS		
	[Display language]: Japanese	MM-DD-YYYY
HH:MM:SS		
[Format]: other than Japanese and English		
	[Display language]: English	MM-DD-YYYY
HH:MM:SS		
	[Display language]: Japanese	YYYY-MM-DD
HH:MM:SS		

 **Note**

Regarding Exclusion Reason

Exclusion reasons are only output when "Use exclusion statements" is checked.

Note that exclusion reasons are not output when the check of "Use exclusion

statements" is removed.



Regarding Insert Lines and Delete Lines

The edited insert lines and delete lines are output only when the type is COBOL and the accumulation mode is NUMBER.

Note that they are not output in other modes.

When the accumulation mode is NUMBER, the insert lines and delete lines of forms that are first output after accumulating COUNTLOG files become "0".

The information of insert lines and delete lines will be reflected on the output form by correcting the COBOL source and accumulating again.



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7.1.7 Output Example of Test Case List

Table 7.18 [Original Header Section]

SIMPLIA TF-EXCOUNTER VXXLXX	Test Case List	Date and Time Created: MM/DD/YYYY HH/MM/SS
-----------------------------	----------------	--------------------------------------------------

Program Name	First date of the accumulated COUNT information file	First time of the accumulated COUNT information file	Last date of the accumulated COUNT information file	Last time of the accumulated COUNT information file	COBOL Source File
JYUCHU	04-23-1999	11:07:27	04-23-1999	11:07:27	C:\Program\JYUCHU.cob

Table 7.19 [Simple Header Section]

Form Type	Program Name	Number of Test Cases	COBOL Source File	Exclusion Statement
Test Case List	JYUCHU	1	JYUCHU.cob	JYUCHU.end

Test Case Name	Instruction Execution Coverage	Total Number of Instructions	Number of Execution Instructions	First date of the accumulated COUNT information file	First time of the accumulated COUNT information file	Last date of the accumulated COUNT information file	Last time of the accumulated COUNT information file
JYUCHU_CASE1	75.00%	40	30	04-23-1999	11:07:27	04-23-1999	11:07:27

5.4 Viewer

The information on execution lines is displayed using a COUNTLOG file and a source program.

1) Operation procedure of Viewer

1. Select "Open COUNTLOG File(O)" from the file menu to open a COUNTLOG file.
2. On the main window, select "Viewer" from the pop-up menu displayed by right-clicking on the COUNTLOG file tree, or from the command menu or the command bar.
3. When using a COBOL source file name, a test case name, and an exclusion statement on the Viewer window, configure the exclusion statement number direction file and then click it.
4. Confirm the execution information from the Viewer main window.

Information



Regarding the Viewer window

When there is a test case name, selecting "*" and "OK" displays the total run times of all test case information. When a test case name is specified, the run times of each piece of test case information are displayed.

2) Regarding the functions of the Viewer main window

On the Viewer main window, the cursor can be moved to a specific line by setting the line number.

1. Select "Jump(J)" from the Edit menu on the Viewer main window.
2. Set a line number in the Jump dialog.
3. Clicking the Jump(J) button moves the cursor to the set line number.

The font can be changed using the following procedure.

1. Select "Font(F)" from the Display menu on the Viewer main window.
2. Specify the desired font, style, and size.
3. The specified information is applied after the OK button is clicked.

6.2 Toolbar



1 2 3 4

No.	Item	Description
1	New	Select when creating a new COUNTLOG file.
2	Open	Select when opening an existing COUNTLOG file.
3	TF-EXCOUNTER Help	Displays the user's guide.
4	Version Information	Displays information about the product version.

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6.1.2 [Command] Menu

Accumulate(A)...
 Viewer(V)...
 Form Output(P)...
 Exclusion Statement Number(E)...

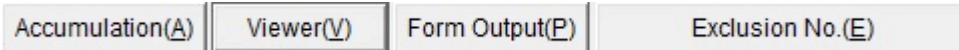
No.	Item	Description
1	Accumulate(A)	Displays the Accumulation dialog for Accumulation.
2	Viewer(V)	Displays the Viewer window .
3	Form Output(P)	Displays the Form Output window .
4	Exclusion Statement Number(E)	Displays the Exclusion Statement Number window .

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6.3 Command Bar



No.	Item	Description
1	Accumulation(A)	Displays the Accumulation dialog for Accumulation.
2	Viewer(V)	Displays the Viewer window .
3	Form Output(P)	Displays the Form Output window .
4	Exclusion No.(E)	Displays the Exclusion Statement Number window .

5.7.1 Accumulation Command

Accumulation of multiple specified COUNT information files can be performed by executing tfexccmd.exe in the installation folder from the command prompt.

The command input format and the functions are explained below.

5.7.1.1 Executable Format

The command description format is shown below. The description format conforms to the following rules:

- Normal characters indicate that they are to be entered without be changed.
- Word of italics in the format need to be replaced.
- Strings enclosed in square brackets "[]" can be omitted. The underlined terms in square brackets will be adopted if the option is omitted.
- Terms separated such as "A | B" in the square brackets indicate that they are options.
- Options are not case sensitive.

Accumulation command:

```
tfexccmd /OUT Folder_name [/NEW] [/MODE NONNUMBER | NUMBER] [/TCASE Test_case_name] [/CODE SJIS | UTF8] [/TEMP Folder_name] File_name ...
```

5.7.1.2 Option

Option	Type	Settings
/OUT	Required	Specify the name of a COUNTLOG file storage folder. Enter a blank space between /OUT and the folder name. Note: - Both absolute paths and relative paths can be used.
/NEW	Optional	Specify this when creating a new COUNTLOG file. Note: - If there is an existing COUNTLOG file with the same name, it will be overwritten.
		Specify the accumulation mode. Enter a blank space after /MODE and then

/MODE	Optional	<p>specify NONNUMBER or NUMBER according to the compile option.</p> <p>Note:</p> <ul style="list-style-type: none"> - When omitted, NONNUMBER will be used.
/TCASE	Optional	<p>Specify a test case name.</p> <p>Enter a blank space between /TCASE and the test case name. When omitted, the test case will be nameless.</p> <p>Specify a test case name using up to 255 single-byte or 127 double- byte characters.</p> <p>Note:</p> <ul style="list-style-type: none"> - When a COUNTLOG file already exists, the following cases will result in an error. Accumulation is not performed. When a test case exists in the COUNTLOG file but no test case is specified for the execution option. When no test case exists in the COUNTLOG file but a test case is specified for the execution option.
/CODE	Optional	<p>Specify the character code of a COUNT information file.</p> <p>Enter a blank space after /CODE and then specify SJIS or UTF8.</p> <p>Note:</p> <ul style="list-style-type: none"> - When omitted, SJIS will be adopted.
/TEMP	Optional	<p>Specify the folder in which the file temporarily used by TF-EXCOUNTER is to be created.</p> <p>Enter a blank space between /TEMP and the folder name.</p> <p>Note:</p> <ul style="list-style-type: none"> - When omitted, the folder specified in the environment variable "TEMP" will be used.
File Name	Required	<p>Specify a COUNT information file name.</p> <p>When specifying multiple files, separate them using blank spaces.</p>

5.7.1.3 Usage Example

Usage examples of the accumulation command are given below.

```
C:\> tfexccmd /MODE NONNUMBER /OUT C:\DATA C:\count.log
```

For multiple files, specify as follows.

```
C:\> tfexccmd /OUT C:\DATA C:\count1.log C:\count2.log C:\count3.log
```

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5.3 Viewing Accumulated Information

The instruction execution coverage is displayed on the main window using a COUNTLOG file and a source program.

1) Operation procedure of COUNTLOG files

1. Select "Open COUNTLOG File" from the [file menu](#), or select "Open" from the [Toolbar](#).
2. Select a COUNTLOG file from the file selection window.
3. Select a COBOL source file name from the Open COUNTLOG File dialog.
4. When using an exclusion statement, select the name of an exclusion statement number direction file. When the file name is selected, the exclusion statement information is reflected.

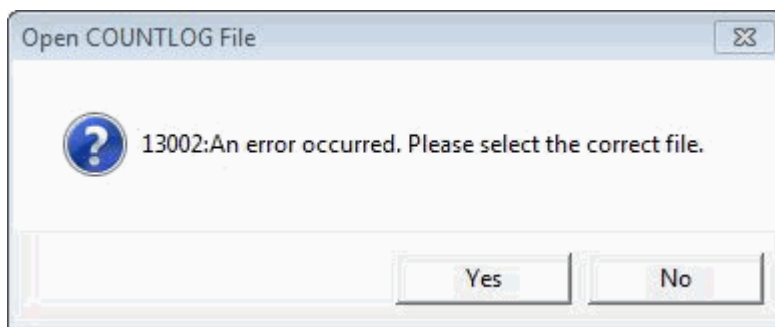
Note



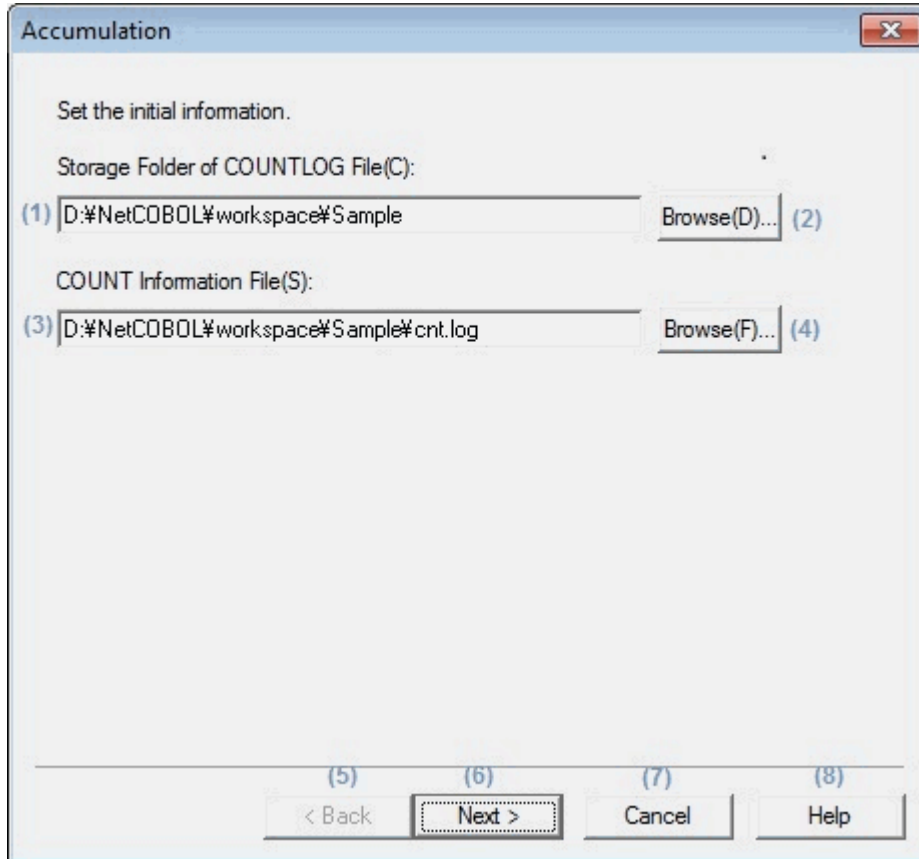
If an error occurs when opening a COBOL source file, the following message is displayed.

Selecting "Yes" returns to the "Open COUNTLOG File" dialog.

Selecting "No" shifts to the main window without calculating the instruction execution coverage.



6.5.2 Accumulation Dialog



No.	Item	Settings
(1)	Storage Folder of COUNTLOG File(C)	Specify the output destination folder for COUNTLOG files.
(2)	Browse(D)	Clicking this button displays the file selection dialog box. Specify the output destination folder for COUNTLOG files.
(3)	COUNT Information File(S)	Specify a COUNT information file to be accumulated. When a current folder has been set in Settings window , specification using only the file name is possible.
(4)	Browse(F)	Clicking this button displays the file selection dialog box. Specify a COUNT information file to be

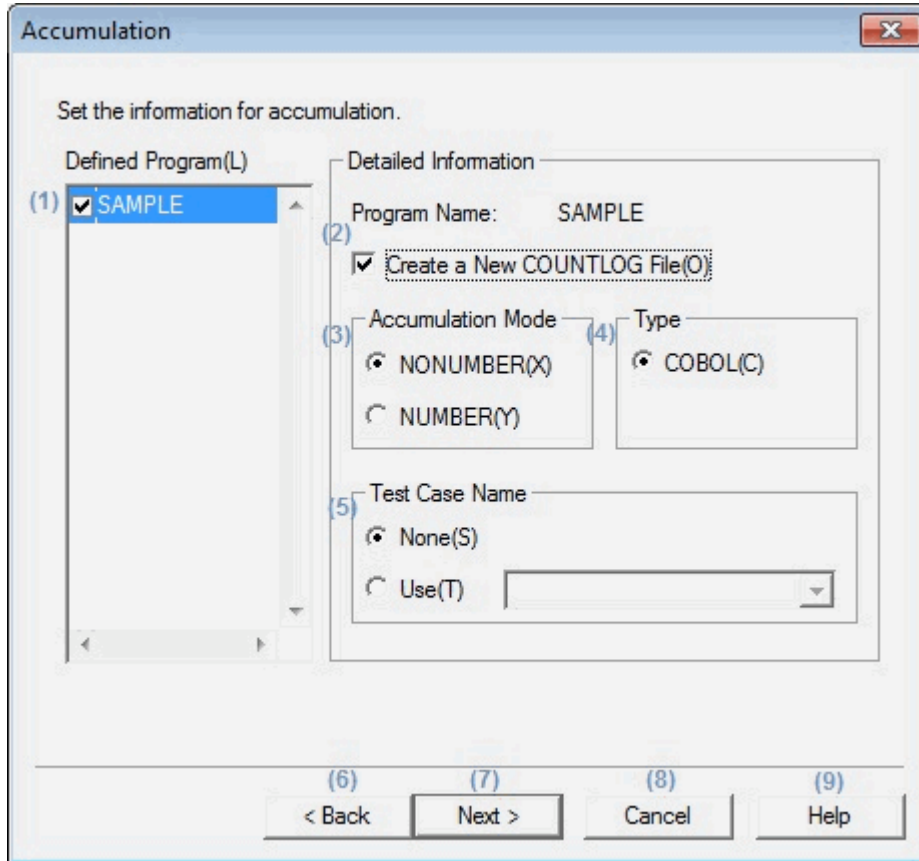
		accumulated.
(5)	Back	Unavailable on the initial Accumulation dialog .
(6)	Next	Proceeds to the Accumulation Settings dialog after the initial information is set.
(7)	Cancel	Clicking this cancels processing.
(8)	Help	Clicking this displays the user's guide.

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6.5.3 Accumulation Settings Dialog



No.	Item	Settings
(1)	Defined Program(L)	Displays a list of program names included in COUNT information. Check the program names to perform accumulation on.
(2)	Create Mode	Select when creating a new COUNTLOG file. This is selected by default for new creation of COUNTLOG files.
(3)	Accumulation Mode	Select an accumulation mode according to the compile option.
(4)	Type	Only the type "COBOL" can be selected.
(5)	Test Case Name	Specify a test case name to be accumulated. (Optional)
(6)	Back	Click when going back to the Accumulation

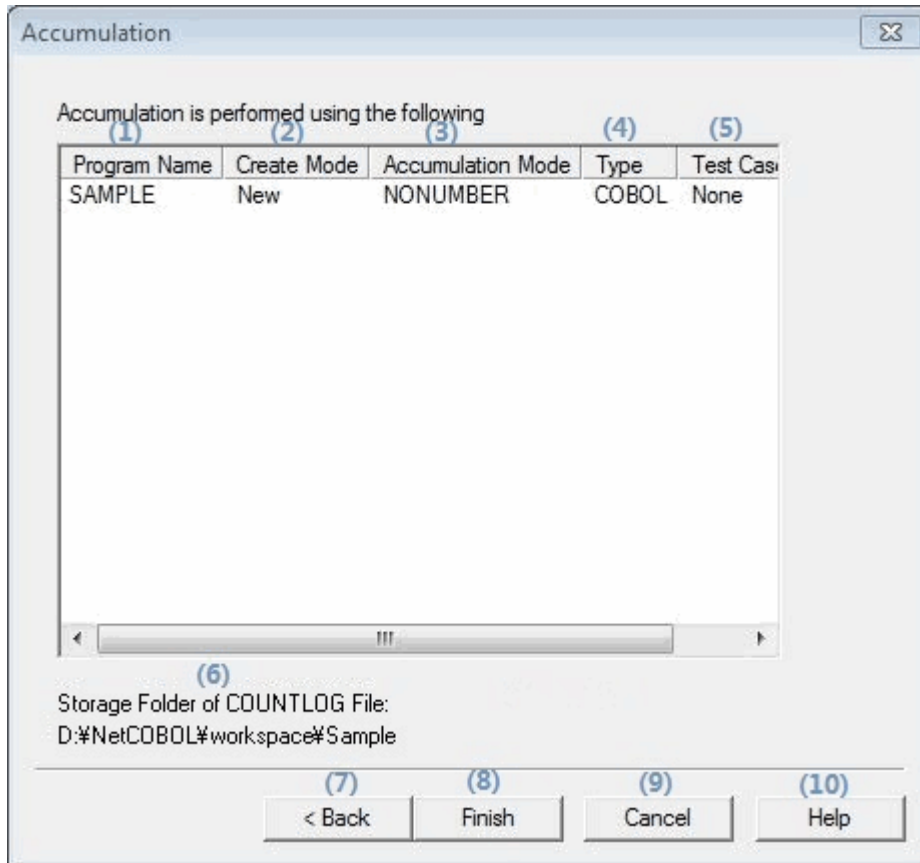
		dialog .
(7)	Next	Proceeds to the Accumulation Confirmation dialog after setting the accumulation information.
(8)	Cancel	Clicking this cancels processing.
(9)	Help	Clicking this displays the user's guide.

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6.5.4 Accumulation Confirmation Dialog



No.	Item	Settings
(1)	Program Name	Displays the program names of the accumulation target set in the Accumulation Dialog .
(2)	Create Mode	Displays the create mode set in the Accumulation Settings dialog .
(3)	Accumulation Mode	Displays the accumulation mode set in the Accumulation Settings dialog .
(4)	Type	Displays the type "COBOL".
(5)	Test Case Name	Displays the test case name set in the Accumulation Settings dialog .
(6)	Storage Folder of COUNTLOG File	Displays the storage folder of COUNTLOG files set in the Accumulation dialog .

(7)	Back	Click when going back to the Accumulation Settings dialog .
(8)	Finish	Click when starting accumulation (COUNTLOG file creation).
(9)	Cancel	Clicking this cancels processing.
(10)	Help	Clicking this displays the user's guide.

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5.8 How to Use TF-EXCOUNTER

This section explains the basic usage of TF-EXCOUNTER using the provided sample program.

The sample program is in the installation_folder\Sample of TF-EXCOUNTER.

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5.8.1 Creation Procedure of COUNT Information Files

1. Open the project of the sample program

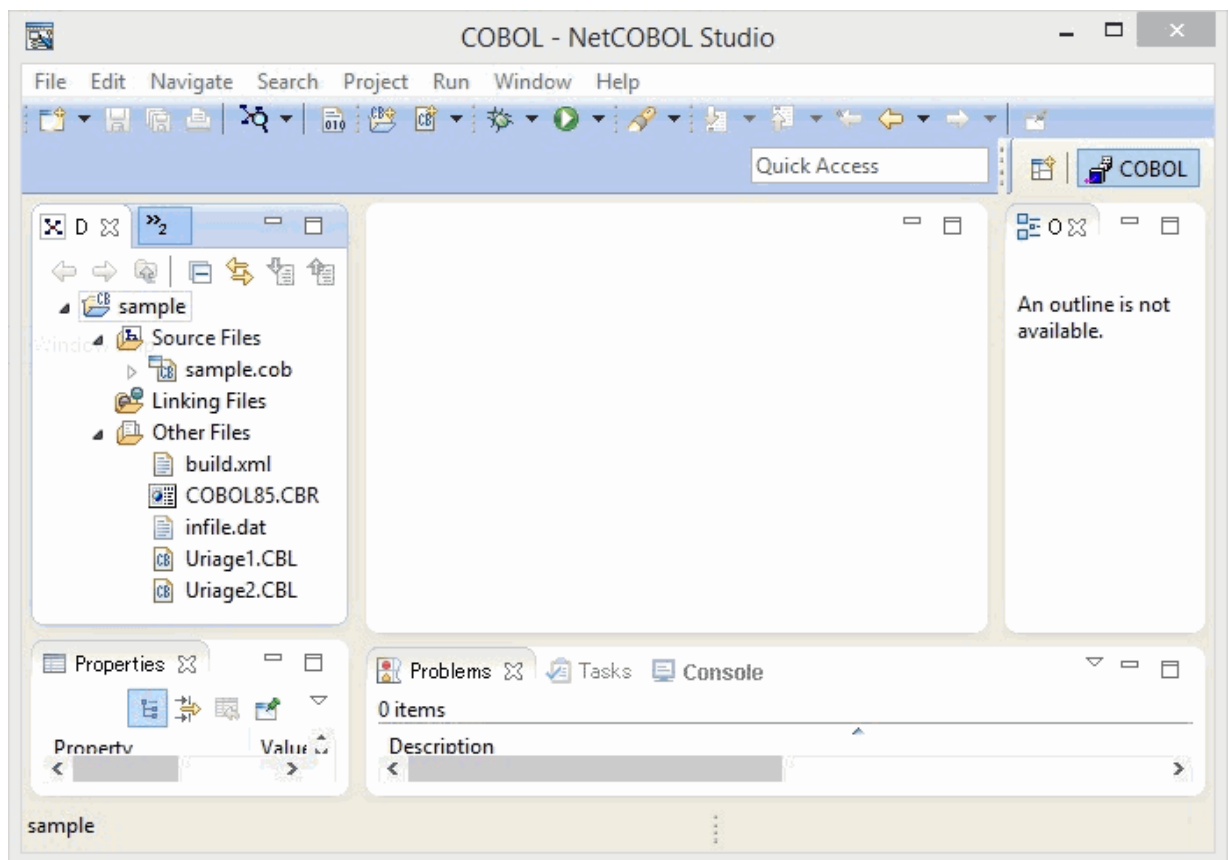
Start NetCOBOL Studio and import the project of the sample program provided with TF-EXCOUNTER.

The project of the sample program is in the installation_folder\Sample of TF-EXCOUNTER.

Copy the resource of the sample program to use it in the workspace.

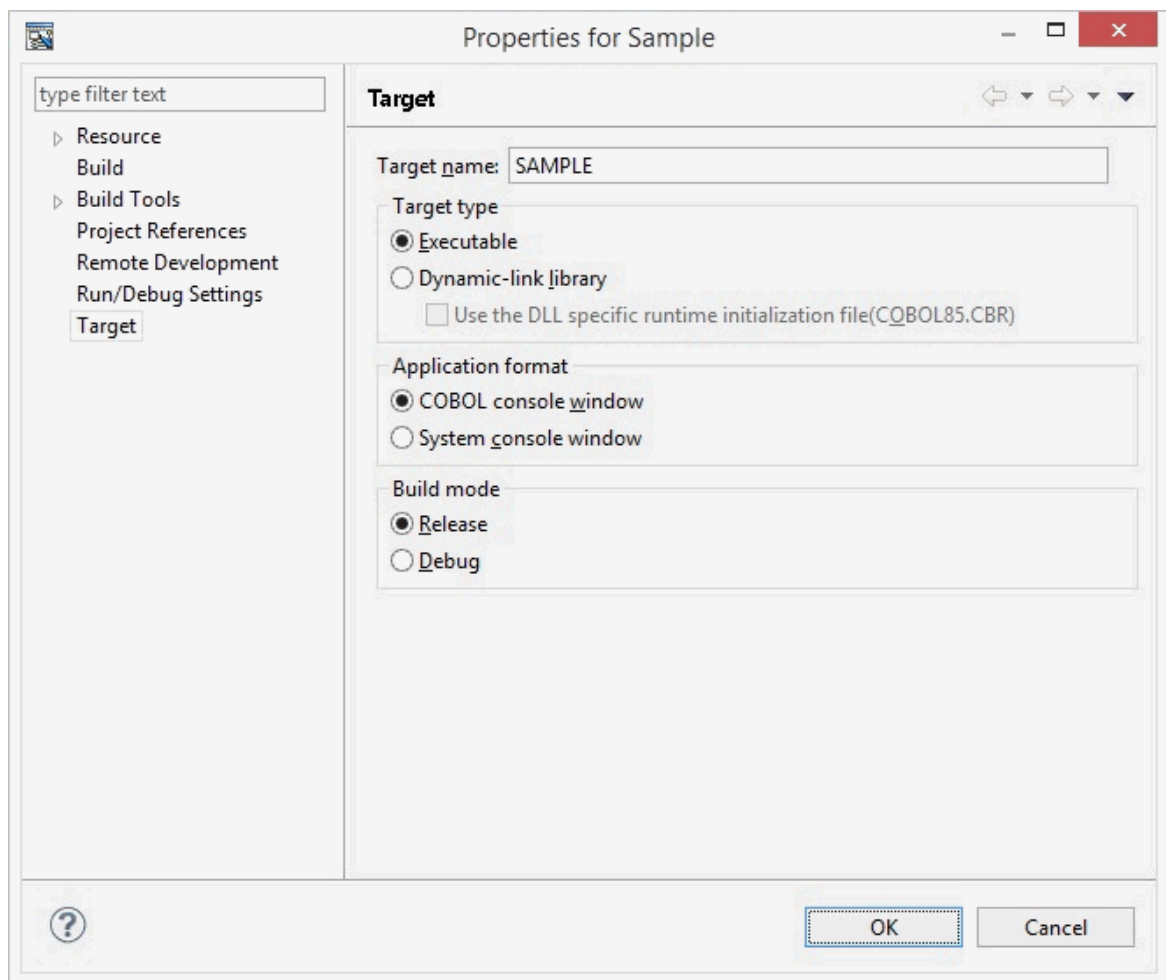
It is necessary to set [Language for non-Unicode programs] to Japanese by setting [Region and Language]. (Example of Windows7)

This procedure is explained using the workspace (D:\NetCOBOL\workspace\Sample).



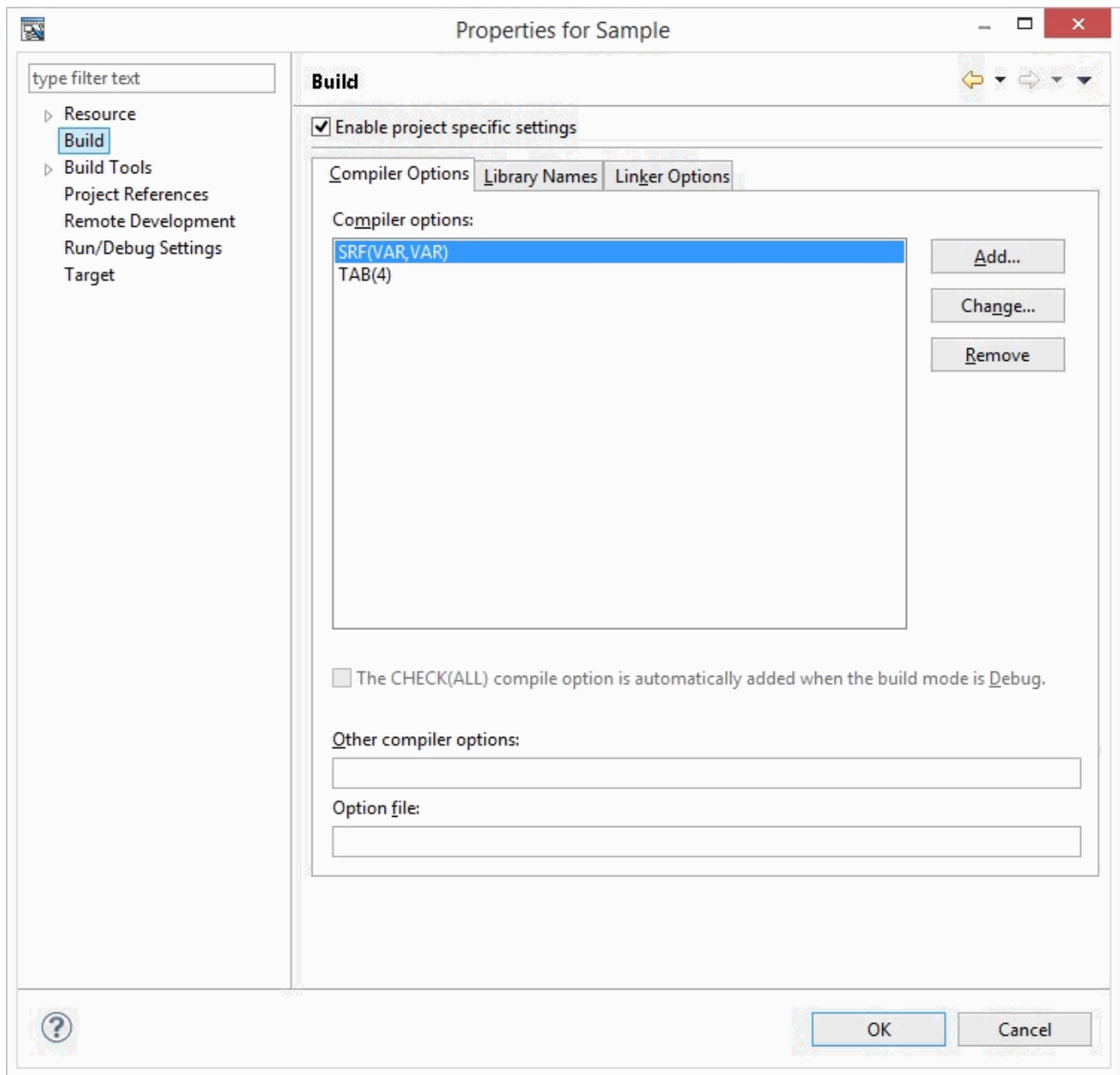
2. Configure the Build Mode

Set the Build Mode to "Release" from the "Target" of "Properties" in the "Project" menu.

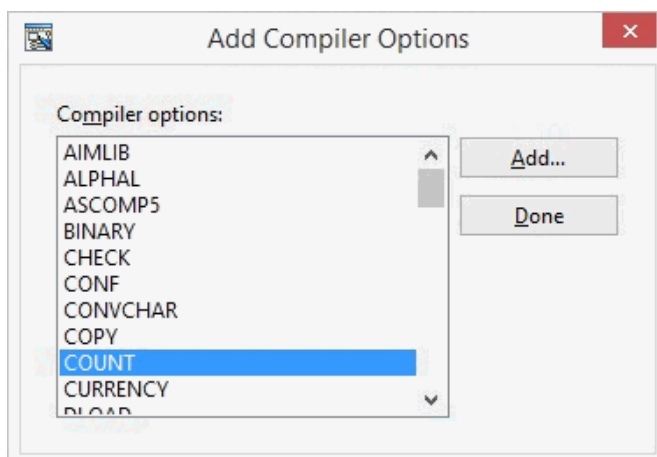


3. Add the COUNT option as the Compiler Options

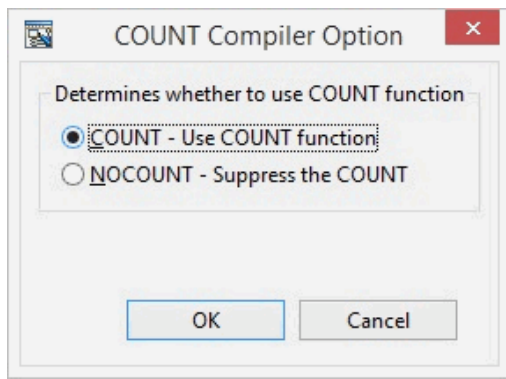
Select "Compiler Options" from the "Build" of "Properties" in the "Project" menu.



Click the "Add" button and then select "COUNT" from "Add Compiler Options".



Select "COUNT - Use COUNT function" from the displayed "COUNT Compiler Option".



4. The build of the sample program

Select "Build Project" from the "Project" menu.

5. Configure the execution environment of the sample program

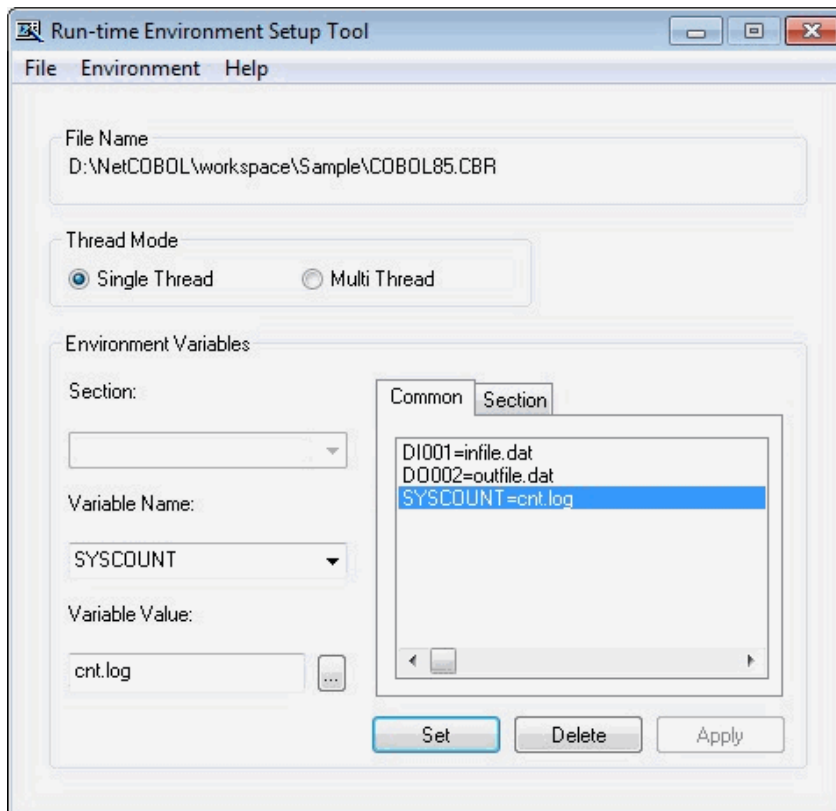
Configure the execution environment using the "Runtime Environment Setup Tool".

Open "COBOL85.CBR", the initialization file for execution of the sample program, from the [Dependency] view or the [Structure] view.

Select the "Common" tab to set the following:

```
DI001: "infile.dat" (Input file)
D0002: "outfile.dat" (Output file)
```

SYSCOUNT: Specify an output file name for COUNT information. (For this procedure, specify "cnt.log".)



Below are the contents of COBOL85.CBR after selecting the Apply button.

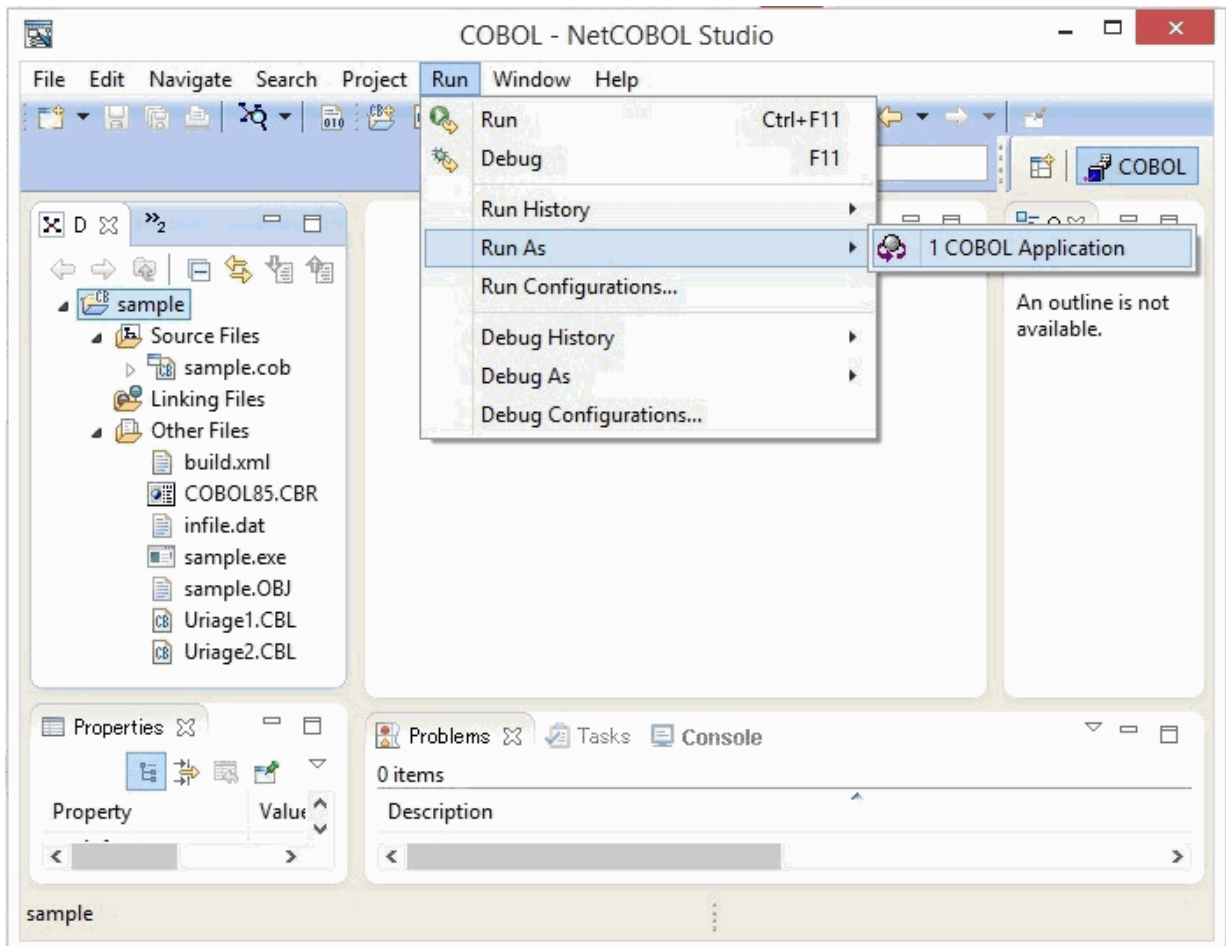
```
DI001=infile.dat
D0002=outfile.dat
SYSCOUNT=cnt.log
```

6. Execute the sample program

Select "COBOL Application" from "Run As" of the "Run" menu.

Executing the sample program creates the COUNT information file "cnt.log" in the sample program storage folder.

Instruction execution coverage is measured from the COUNT information file using TF-EXCOUNTER.



Information



Regarding the execution environment configuration file (COBOL85.CBR)

If COBOL85.CBR does not exist, create it in the execution program storage folder using a text editor.

Description example of COBOL85.CBR

```
DI001=infile.dat  
DO002=outfile.dat  
SYSCOUNT=cnt.log
```

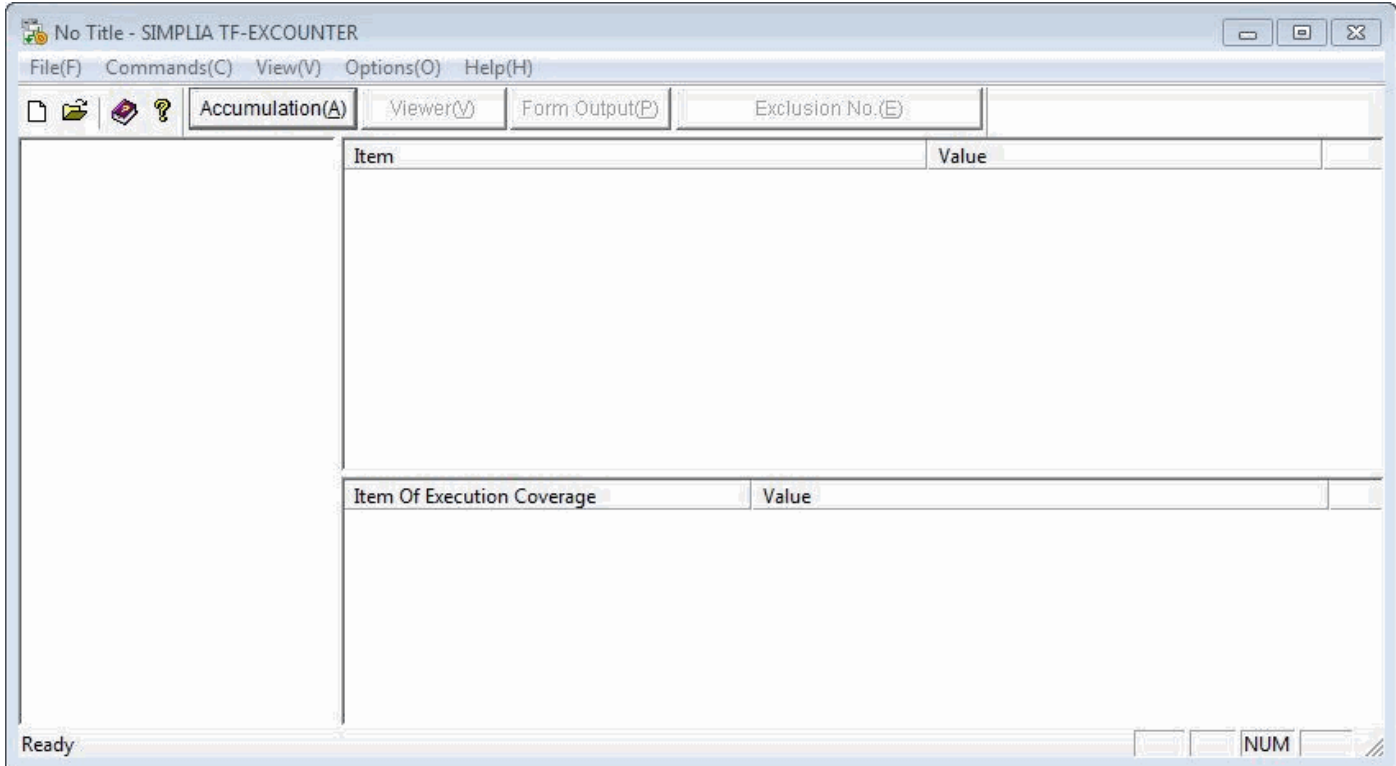


Regarding the execution environment configuration tool

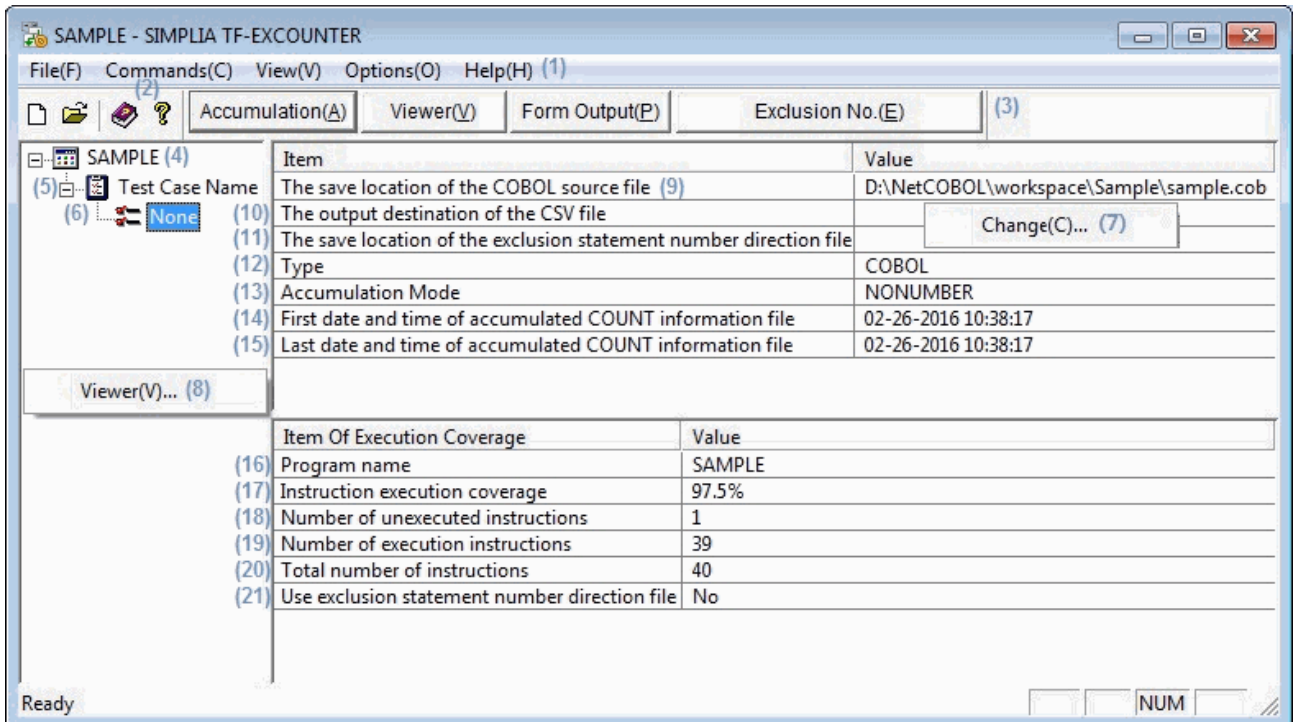
Refer to the COBOL User's Guide for information on how to use the execution environment configuration tool.

6.5.1 Main Window

[When Starting]



[When Deploying a COUNTLOG File]



No.	Item	Description
(1)	Menu Bar	Displays the menus.

(2)	Toolbar	Displays the Toolbar.
(3)	Command Bar	Displays the command bar.
(4)	Program name	Displays the names of programs included in COUNTLOG files.
(5)	Test Case	Displays test case names in the lower layer.
(6)	Test Case Name	Displays test case names.
(7)	Change(C)	The pop-up menu displayed by right-clicking on "The save location of the COBOL source file", "The output destination of the CSV file", or "The save location of the exclusion statement number direction file". Displays the window for changing the storage location or the output destination of files.
(8)	Viewer(V)	The pop-up menu displayed by right-clicking on the COUNTLOG file tree. Displays the Viewer window for starting the Viewer.
(9)	The save location of the COBOL source file	Displays the storage location of COBOL source files.
(10)	The output destination of the CSV file	Displays the output destination of the CSV file most recently created using Form Output.
(11)	The save location of the exclusion statement number direction file	Displays the storage location of the exclusion statement number direction file most recently created using the create the exclusion statement number direction file function.
(12)	Type	Displays the type "COBOL".
(13)	Accumulation Mode	Displays the Accumulation Mode, "NUMBER" or "NONNUMBER", which was specified using Accumulation.
(14)	First date and time of the accumulated COUNT information file	Displays the date and time when COUNT information was first accumulated.
(15)	Last date and time of accumulated COUNT information file	Displays the date and time when COUNT information was last accumulated.
(16)	Program name or Test Case Name	Displays the program name of a COUNTLOG file, or the selected test case name.
(17)	Instruction execution coverage	Displays the instruction execution coverage.
(18)	Number of unexecuted instructions	Displays the number of unexecuted instructions.
(19)	Number of execution instructions	Displays the number of execution instructions.
(20)	Total number of instructions	Displays the total number of instructions.
(21)	Use exclusion statement number	Displays the usage of exclusion statement number direction files.

	direction file	<p>"No": Indicates the coverage is measured without using an exclusion statement number direction file.</p> <p>"Yes": Indicates the coverage is measured using an exclusion statement number direction file.</p>
--	----------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Information



The display format of accumulation COUNT first time information File date and final accumulation COUNT information File date is the following according to the setting of [Region and Language]

[Format]: Japanese [Display language]: English YYYY-MM-DD HH:MM:SS

[Display language]: Japanese YYYY-MM-DD HH:MM:SS

[Format]: English [Display language]: English MM-DD-YYYY HH:MM:SS

[Display language]: Japanese MM-DD-YYYY HH:MM:SS

[Format]: other than Japanese and English

[Display language]: English MM-DD-YYYY HH:MM:SS

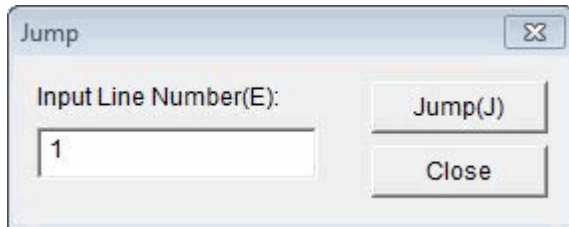
[Display language]: Japanese YYYY-MM-DD HH:MM:SS

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6.9.3 Jump Dialog



No.	Item	Settings
(1)	Input Line Number(E)	Enter the line number of a COBOL source file to jump to.
(2)	Jump(J)	Moves the cursor to the line number specified for Input Line Number.
(3)	Close	Closes the Jump window.

7.1.2 Output Example of Cumulative Execution Instruction Information

Table 7.5 [Original Header Section]

SIMPLIA TF-EXCOUNTER VXXLXX	Cumulative Execution Instruction Information	Date and Time Created: MM/DD/YYYY HH/MM/SS
-----------------------------	----------------------------------------------	--------------------------------------------------

Program Name	First date of the accumulated COUNT information file	First time of the accumulated COUNT information file	Last date of the accumulated COUNT information file	Last time of the accumulated COUNT information file	COBOL Source File
JYUCHU	04-23-1999	11:07:27	04-23-1999	11:07:27	C:\Program\JYUCHU.cob

Table 7.6 [Simple Header Section]

Form Type	Program Name	Test Case Name	COBOL Source File	Exclusion Statement
Cumulative Execution Instruction Information	JYUCHU	-	JYUCHU.cob	-

Not Executed Mark	Line Numbers	Source Code	Run Times
	110	PROCEDURE DIVISION JYUCHU	
	111	PERFORM INITIAL PROCESSING.	1
	112	PERFORM UNTIL ENDING FLAG = CONSTANT - ON	1
X	113	PERFORM MAIN PROCESSING	0
	114	END-PERFORM.	
	115	PERFORM END PROCESSING.	1
		:	
		:	

Number of Test Cases	Total Number of Instructions	Number of Execution Instructions	Number of Unexecuted Instructions	Instruction Execution Coverage
1	40	30	10	75.00%

7.1.6 Test Case List

Table 7.15 [Original Header Section]

[Product Name]	[Form Type]	[Date and Time Created]			
Program Name	First date of the accumulated COUNT information file	First time of the accumulated COUNT information file	Last date of the accumulated COUNT information file	Last time of the accumulated COUNT information file	COBOL Source File

No.	Edit Item	Details of Editing
1	Product Name	Edit the product name.
2	Form Type	Edit the form type.
3	Date and time created	Edit the date and time of CSV file creation.
4	Program Name	Edit the program name of the specified COUNTLOG file.
5	First date of the accumulated COUNT information file	Edit the date of the initially accumulated COUNT information.
6	First time of the accumulated COUNT information file	Edit the time of the initially accumulated COUNT information.
7	Last date of the accumulated COUNT information file	Edit the date of the final accumulated COUNT information.
8	Last time of the accumulated COUNT information file	Edit the time of the final accumulated COUNT information.
9	COBOL Source File	Edit the COBOL source file name specified using Form Output.

Table 7.16 [Simple Header Section]

Form Type	Program Name	Number of Test Cases	COBOL Source File	Exclusion Statement
No.	Edit Item	Details of Editing		
1	Form Type	Edit the form type of the output form.		
2	Program Name	Edit the program name of the specified COUNTLOG file.		

3	Number of Test Cases	Edit the number of test cases in COUNTLOG.
4	COBOL Source File	Edit the COBOL source file name specified using Form Output. Only COBOL source file names are output.
5	Exclusion Statement	Edit the exclusion statement number direction file name specified using Form Output. When exclusion statement information is not specified, "-" is displayed. Only exclusion statement number direction file names are output.

Table 7.17 [Detail Section]

Test Case Name	Instruction Execution Coverage	Total Number of Instructions	Number of Execution Instructions	Insert Lines	Delete Lines	First date of the accumulated COUNT information file	First time of the accumulated COUNT information file	Last date of the accumulated COUNT information file	Last time of the accumulated COUNT information file
----------------	--------------------------------	------------------------------	----------------------------------	--------------	--------------	------------------------------------------------------	------------------------------------------------------	-----------------------------------------------------	-----------------------------------------------------

No.	Edit Item	Details of Editing
1	Test Case Name	The test case name of COUNTLOG.
2	Instruction execution coverage	Calculated by dividing Number of execution instructions by Total number of instructions.
3	Total number of instructions	Edit the total number of instructions of COBOL source files. Only PROCEDURE DIVISION can be edited and exclusion statements are excluded.
4	Number of execution instructions	Edit the number of executed instructions.
5	Insert Lines	Edit the number of insert lines.
6	Delete Lines	Edit the number of delete lines.
7	First date of the accumulated COUNT information file	Edit the date of the initially accumulated COUNT information.
8	First time of the accumulated COUNT information file	Edit the time of the initially accumulated COUNT information.
9	Last date of the accumulated COUNT information file	Edit the date of the final accumulated COUNT information.
10	Last time of the accumulated COUNT information file	Edit the time of the final accumulated COUNT information.

 **Information**



Regarding Exclusion Statement and Total number of instructions, Number of execution instructions, Number of unexecuted instructions, and Instruction execution coverage

When "Use exclusion statements" is checked, line numbers directed in exclusion statement number direction files do not become the target of Total number of instructions, Number of execution instructions, or Number of unexecuted instructions.

Therefore, when the line numbers for all unexecuted instructions are directed in an exclusion statement number direction file, the instruction execution coverage will be 100%.

2. The display format at the date and time of creation is the following according to the setting of the region and the language.

[Format]: Japanese	[Display language]: English	YYYY/MM/DD HH:MM:SS
	[Display language]: Japanese	YYYY年MM月DD日 HH時MM分SS秒
[Format]: English	[Display language]: English	MM/DD/YYYY HH:MM:SS
	[Display language]: Japanese	MM/DD/YYYY HH:MM:SS
[Format]: other than Japanese and English	[Display language]: English	MM/DD/YYYY HH:MM:SS
	[Display language]: Japanese	YYYY年MM月DD日 HH時MM分SS秒

The display format of accumulation COUNT first time information File date and final accumulation COUNT information File date is the following.

[Format]: Japanese	[Display language]: English	YYYY-MM-DD HH:MM:SS
	[Display language]: Japanese	YYYY-MM-DD HH:MM:SS
[Format]: English	[Display language]: English	MM-DD-YYYY HH:MM:SS
	[Display language]: Japanese	MM-DD-YYYY HH:MM:SS
[Format]: other than Japanese and English	[Display language]: English	MM-DD-YYYY HH:MM:SS
	[Display language]: Japanese	YYYY-MM-DD HH:MM:SS

Note



Regarding Exclusion Reason

Exclusion reasons are only output when "Use exclusion statements" is checked.

Note that exclusion reasons are not output when the check of "Use exclusion statements" is removed.



Regarding Insert Lines and Delete Lines

The edited insert lines and delete lines are output only when the type is COBOL and the accumulation mode is NUMBER.

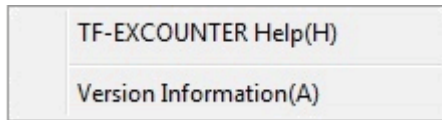
Note that they are not output in other modes.

When the accumulation mode is NUMBER, the insert lines and delete lines of forms that are first output after accumulating COUNTLOG files become "0".

The information of insert lines and delete lines will be reflected on the output form by correcting the COBOL source and accumulating again.

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6.1.5 [Help] Menu



No.	Item	Description
1	TF-EXCOUNTER Help(H)	Displays the user's guide.
2	Version Information(A)	Displays information about the product version.

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6.1.3 [View] Menu



No.	Item	Description
1	Toolbar(T)	Select whether to display the Toolbar .
2	Command Bar(C)	Select whether to display the Command Bar .
3	Status Bar(S)	Select whether to display the Status Bar.

6.9.1 Viewer Window

No.	Item	Settings
(1)	COBOL Source File Name(S)	Specify the COBOL source file that includes the target program. When a file exists in the current folder set in the Settings window , specification using only the file name is also possible.
(2)	Browse(F)	Clicking this button displays the file selection dialog box. Specify a COBOL source file from the file selection dialog box.
(3)	Test Case Name(T)	Specify the name of a test case to be displayed. When "*" is selected, the accumulated run times of all test cases is displayed.
(4)	Use exclusion statements(U)	Check when using an exclusion statement number direction file.
(5)	Exclusion Statement	Specify an exclusion statement number

	Number Direction File Name(E)	direction file. When a file exists in the current folder set in the Settings window , specification using only the file name is also possible.
(6)	Browse(X)	Clicking this button displays the file selection dialog box. Specify an exclusion statement number direction file from the file selection dialog box.
(7)	OK	Click when displaying the Viewer main window.
(8)	Cancel	Clicking this cancels processing.
(9)	Help	Clicking this displays the user's guide.

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6.7.1 Form Output Window

Form Output

Set the information of the form to output.

COUNTLOG File Name:

D:\NetCOBOL\workspace\Sample\SAMPLE.clg (1)

Form Type

Cumulative Execution Instruction Information(R)

(2) Individual Execution Instruction Information(K) (3)

Test Case List(I)

COBOL Source File Name(S):

D:\NetCOBOL\workspace\Sample\sample.cob (4) Browse(F)... (5)

Output CSV File Name(C):

D:\NetCOBOL\workspace\Sample\test.csv (6) Browse(O)... (7)

Output Options

(8) Output simple header information(H)

(9) Use exclusion statements(U)

Exclusion Statement Number Direction File Name(E):

(10) Browse(X)... (11)

(12) OK (13) Cancel (14) Help

No.	Item	Settings
(1)	COUNTLOG File Name	Displays the names of COUNTLOG files that are the target of form output.
(2)	Form Type	Select the form type of the form to be output.
		Specify a test case name that is the target for accumulating individual execution instruction

(3)	Test Case Name	information. (This is not available for accumulation of cumulative execution instruction information and test case list output)
(4)	COBOL Source File Name(S)	Specify the COBOL source file that includes the target program. When a file exists in the current folder set in the Settings window , specification using the file name is also possible.
(5)	Browse(F)	Clicking this button displays the file selection dialog box. Specify a COBOL source file from the file selection dialog box.
(6)	Output CSV File Name(C)	Specify the output destination for the CSV file and the file name. When a current folder has been set in the Settings window , specification using only the file name is also possible.
(7)	Browse(O)	Clicking this button displays the file selection dialog box. Specify an output CSV file from the file selection dialog box.
(8)	Output simple header information(H)	Check this when outputting using a simple header. When this is not checked, the original header of the CSV file is output.
(9)	Use exclusion statements(U)	Check when using an exclusion statement number direction file.
(10)	Exclusion Statement Number Direction File Name(E)	Specify an exclusion statement number direction file. When a file exists in the current folder set in the Settings window , specification using only the file name is also possible.
(11)	Browse(X)	Clicking this button displays the file selection dialog box. Specify an exclusion statement number direction file from the file selection dialog box.
(12)	OK	Click this to create the CSV file.
(13)	Cancel	Clicking this cancels processing.
(14)	Help	Clicking this displays the user's guide.

6.8.1 Exclusion Statement Number Window

Exclusion Statement Number

Set the information of the exclusion statement number direction file.

COUNTLOG File Name:

COBOL Source File Name(S):
 (3)

Exclusion Statement Number Direction File Name(E):
 (5)

(6) (7) (8)

No.	Item	Settings
(1)	COUNTLOG File Name	Specify the COUNTLOG file name that is the target of creation of the exclusion statement number direction file.
(2)	COBOL Source File Name(S)	Specify the COBOL source file that includes the target program. When a file exists in the current folder set in the Settings window , specification using only the file name is also possible.
(3)	Browse(F)	Clicking this button displays the file selection dialog box. Specify a COBOL source file from the file selection dialog box.
(4)	Exclusion Statement Number Direction File Name(E)	Specify the output destination for the exclusion statement number direction file and the file name. When a current folder has been set in the Settings window , specification using only the file name is possible.
		Clicking this button displays the file

(5)	Browse(X)	selection dialog box. Specify an exclusion statement number direction file from the file selection dialog box.
(6)	OK	Click this when creating the exclusion statement number direction file.
(7)	Cancel	Clicking this cancels processing.
(8)	Help	Clicking this displays the user's guide.

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6.4 Menu (Viewer Main Window)

The section explains the menus on the Viewer main window.

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5.7.2 Form Output Command

Forms of multiple COUNTLOG files can be output collectively by executing fs1tctab.exe in the installation folder from the command prompt.

The command input format and the functions are explained below.

5.7.2.1 Executable Format

The command description format is shown below. The description format conforms to the following rules:

- Normal characters indicate that they are to be entered without be changed.
- Word of italics in the format need to be replaced.
- Strings enclosed in braces "{ }" indicate that one term of the string must be specified.
- Strings enclosed in square brackets "[]" can be omitted. The underlined terms in square brackets will be adopted if the option is omitted.
- Terms separated such as "A | B" in the square brackets indicate that they are options.
- Options are not case sensitive.

Single output:

```
fs1tctab /IF COUNTLOG_file_name {/MR | /MK [Test_case_name] | /TI} [/SF
COBOL_source_file_name] [/IS | /IU] [/OF Output_CSV_file_name] [/OS | /OU]
[/NOLOG] [/EX [Exclusion_statement_number_direction_file_name]] [/SHD]
```

Batch output:

```
fs1tctab /ID COUNTLOG_folder_name {/MR | /MK [Test_case_name] | /TI} [/SD
COBOL_source_folder_name] [/IS | /IU] [/OD Output_CSV_folder_name] [/OS | /OU]
[/NOLOG] [/EX
[Exclusion_statement_number_direction_file_storage_folder_name]] [/SHD]
```

5.7.2.2 Options

The available options are as follow.

Output Mode	Option	Type	Settings
Single output	/IF	Required	Specify a COUNTLOG file name. Enter a blank space between /IF and the full path. Note: Describe the full path including the COUNTLOG file name.
	/MR		Specify a form to output. The contents of specification options are as follows: <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">/MR: Output of cumulative execution instruction information</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">/MK: Output of individual execution instruction information</div> <div style="border: 1px solid black; padding: 2px;">/TI: Output of test case list</div>

/MK /TI	Required	<p>For the format of the forms to be output, refer to "7.1 Form Output (CSV File)".</p> <p>Note:</p> <ul style="list-style-type: none"> - When specifying /MK (individual execution instruction information), enter a blank space between /MK and the test case name. - When a test case name is not specified, information of all test cases in the COUNTLOG file is output.
/SF	Optional	<p>Specify a COBOL source file name. Enter a blank space between /SF and the full path.</p> <p>Note:</p> <ul style="list-style-type: none"> - Describe the full path including the COBOL source file name. - When an option is not specified, the COBOL source file set in the COUNTLOG file will be used. - If an option is not specified and the COBOL source file is not set in the COUNTLOG file, it results in an error.
/IS /IU	Optional	<p>Specify the character code of the COBOL source file. The contents of specification options are as follows:</p> <div data-bbox="582 929 1556 974" style="border: 1px solid black; padding: 2px;">/IS: Specify when the input COBOL source is SJIS. (Default)</div> <div data-bbox="582 1008 1556 1052" style="border: 1px solid black; padding: 2px;">/IU: Specify when the input COBOL source is UTF-8.</div> <p>Note:</p> <ul style="list-style-type: none"> - When omitted, SJIS will be adopted.
/OF	Optional	<p>Specify an output CSV file name. Enter a blank space between /OF and the full path.</p> <p>Note:</p> <ul style="list-style-type: none"> - Describe the full path including the CSV file name. - When no option is specified, the file is output to the path set in the COUNTLOG file. - If an option is not specified and is not set in the COUNTLOG file, the file is output to the path specified using "/IF (COUNTLOG file name)". - CSV files are output conforming to the following naming conventions: Naming conventions when the option is specified are as follow: <div data-bbox="582 1646 1556 1724" style="border: 1px solid black; padding: 2px;">Cumulative execution instruction information: [The specified file name].csv</div> <div data-bbox="582 1758 1556 1881" style="border: 1px solid black; padding: 2px;">Individual execution instruction information: [The specified file name]_[Test case name].csv * When only /MK is specified, as many files as test cases are output.</div> <div data-bbox="582 1904 1556 1960" style="border: 1px solid black; padding: 2px;">Test case list: [The specified file name].csv</div> <p>Naming conventions when the option is not specified are as follows:</p> <div data-bbox="582 2038 1556 2116" style="border: 1px solid black; padding: 2px;">Cumulative execution instruction information: MR_COUNTLOG_file_name_Output_date_and_time.csv</div>

		<p>Individual execution instruction information: MK_COUNTLOG_file_name_test_case_name_Output_date_and_time.csv * When only /MK is specified, as many files as test cases are output.</p> <p>Test case list: TI_COUNTLOG_file_name_Output_date_and_time.csv</p> <p>※- The display format of the output date is the following according to the setting of [Region and Language].</p> <p>[Format] : Japanese [Display language]: English YYMMDDHHMMSSFFF [Display language]: Japanese YYMMDDHHMMSSFFF</p> <p>[Format]: English [Display language]: English MMDDYYHHMMSSFFF [Display language]: Japanese MMDDYYHHMMSSFFF</p> <p>[Format]: Excluding Japanese and English [Display language]: English MMDDYYHHMMSSFFF [Display language]: Japanese YYMMDDHHMMSSFFF</p>
/OS /OU	Optional	<p>Specify the character code of the CSV file. The contents of specification options are as follows:</p> <p>/OS: Specify when the output CSV file is SJIS. (Default)</p> <p>/OU: Specify when the output CSV file is UTF-8.</p> <p>Note: - When omitted, SJIS will be adopted.</p>
/NOLOG	Optional	<p>Specify when the batch execution log is not to be output.</p> <p>Note: - When not specified, the batch execution log is output.</p>
/EX	Optional	<p>Specify an exclusion statement number direction file. Enter a blank space after /EX and specify the full path of the file name.</p> <p>Note: - When an option is specified and an exclusion statement number direction file name is not specified, the exclusion statement number direction file in the COUNTLOG file will be used. - When an option is not specified, the exclusion statement number direction file is not applied.</p>
/SHD	Optional	<p>Specify when outputting simple header information to CSV files.</p> <p>Note: - When not specified, the original header information of the CSV file is output to forms.</p>
Batch output		Specify the name of a COUNTLOG file storage folder.

/ID	Required	<p>Enter a blank space between /ID and the full path.</p> <p>Note: Describe the full path including the COUNTLOG file storage folder name.</p>
/MR /MK /TI	Required	<p>Specify a form to output. The contents of specification options are as follows:</p> <div data-bbox="582 315 1556 365" style="border: 1px solid black; padding: 2px;">/MR: Output of cumulative execution instruction information</div> <div data-bbox="582 394 1556 443" style="border: 1px solid black; padding: 2px;">/MK: Output of individual execution instruction information</div> <div data-bbox="582 472 1556 521" style="border: 1px solid black; padding: 2px;">/TI: Output of test case list</div> <p>Note:</p> <ul style="list-style-type: none"> - When specifying /MK (individual execution instruction information), enter a blank space between /MK and the test case name. - When a test case name is not specified, information of all test cases in the COUNTLOG file is output.
/SD	Optional	<p>Specify a COBOL source storage folder name.</p> <p>Enter a blank space between /SD and the full path.</p> <p>Note:</p> <ul style="list-style-type: none"> - Describe the full path of the COBOL source storage folder (directory). - When an option is not specified, the COBOL source file set in the COUNTLOG file will be used. - If an option is not specified and the COBOL source file is not set in the COUNTLOG file, it results in an error.
/IS /IU	Optional	<p>Specify the character code of the COBOL source file. The contents of specification options are as follows:</p> <div data-bbox="582 1240 1556 1290" style="border: 1px solid black; padding: 2px;">/IS: Specify when the input COBOL source is SJIS. (Default)</div> <div data-bbox="582 1319 1556 1368" style="border: 1px solid black; padding: 2px;">/IU: Specify when the input COBOL source is UTF-8.</div> <p>Note:</p> <ul style="list-style-type: none"> - When omitted, SJIS will be adopted.
		<p>Specify the name of an output CSV file storage folder.</p> <p>Enter a blank space between /OD and the full path.</p> <p>Note:</p> <ul style="list-style-type: none"> - Describe the full path of the folder (directory) to which CSV files will be output. - If not specified in a COUNTLOG file, the files are output to the path specified for the "COUNTLOG file storage folder name (/ID)". - CSV files are output conforming to the following naming conventions: <div data-bbox="582 1856 1556 1933" style="border: 1px solid black; padding: 2px;"> <p>Cumulative execution instruction information: MR_COUNTLOG_file_name_Output_date_and_time.csv</p> </div> <div data-bbox="582 1962 1556 2085" style="border: 1px solid black; padding: 2px;"> <p>Individual execution instruction information: MK_COUNTLOG_file_name_test_case_name_Output_date_and_time.csv * When only /MK is specified, as many files as test cases are output.</p> </div>

/OD	Optional	<p>Test case list: TI_COUNTLOG_file_name_Output_date_and_time.csv</p> <hr/> <p>※- The display format of the output date is the following according to the setting of [Region and Language].</p> <p>[Format]: Japanese [Display language]: English YYMMDDHHMMSSFFF</p> <p>[Display language]: Japanese YYMMDDHHMMSSFFF</p> <p>[Format]: English [Display language]: English MMDDYYHHMMSSFFF</p> <p>[Display language]: Japanese MMDDYYHHMMSSFFF</p> <p>[Format]: Excluding Japanese and English</p> <p>[Display language]: English MMDDYYHHMMSSFFF</p> <p>[Display language]: Japanese YYMMDDHHMMSSFFF</p>
/OS /OU	Optional	<p>Specify the character code of the CSV file. The contents of specification options are as follows:</p> <hr/> <p>/OS: Specify when the output CSV file is SJIS. (Default)</p> <hr/> <p>/OU: Specify when the output CSV file is UTF-8.</p> <p>Note: - When omitted, SJIS will be adopted.</p>
/NOLOG	Optional	<p>Specify when the batch execution log is not to be output.</p> <p>Note: - When not specified, the batch execution log is output.</p>
/EX	Optional	<p>Specify the storage folder name of an exclusion statement number direction file.</p> <p>Enter a blank space after /EX and then specify the full path of the exclusion statement number direction file storage folder.</p> <p>Note: - When an option is specified and a storage folder for exclusion statement number direction files is not specified, the exclusion statement number direction file of the COUNTLOG file will be used. - When an option is not specified, the exclusion statement number direction file is not applied.</p>
/SHD	Optional	<p>Specify when outputting simple header information to CSV files.</p> <p>Note: - When not specified, the original header information of the CSV file is output to forms.</p>

5.7.2.3 Usage Example

Usage examples of the form output command are given below.

Single output:

```
C:\> fs1tctab /IF C:\DATA\Sample.clg /MR /SF C:\SRC\Sample.cob /IS /OF
C:\DATA\Sample.csv /OS
```

```
Batch output:
C:\> fs1tctab /ID C:\DATA /MR /SD C:\SRC /IS /OD C:\DATA /OS
```

5.7.2.4 Batch Execution Log

When the /NOLOG option is not specified, the execution results of the form output command are output to log files.

Output location: The user environment variable (TEMP/TMP). When the user environment variable is not set, the results are output to the system environment variable (TEMP/TMP).

File name: fs1tctab.log

Output format: Appended with a description per execution of a command.

```
Output example:
2011/10/25 19:40:40 Form output is starting.
2011/10/25 19:40:40 COUNTLOG File: [C:\cobol\SAMPLE.clg]
2011/10/25 19:40:40 Output Form Options: [/MR]
2011/10/25 19:40:40 COBOL Source File: [C:\cobol\sample.cob]
2011/10/25 19:40:40 Output CSV file:[C:\cobol\MR_SAMPLE_111025194040223.csv]
2011/10/25 19:40:40 Form output has finished.
```

※The display format of the Execution date of the batch Execution log is the following according to the setting of [Region and Language].

[Format]: Japanese	[Display language]: English	YYYY/MM/DD HH:MM:SS
	[Display language]: Japanese	YYYY/MM/DD HH:MM:SS
[Format]: English	[Display language]: English	MM/DD/YYYY HH:MM:SS
	[Display language]: Japanese	MM/DD/YYYY HH:MM:SS
[Format]: other than Japanese and English	[Display language]: English	MM/DD/YYYY HH:MM:SS
	[Display language]: Japanese	YYYY/MM/DD HH:MM:SS

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6.5 Accumulation

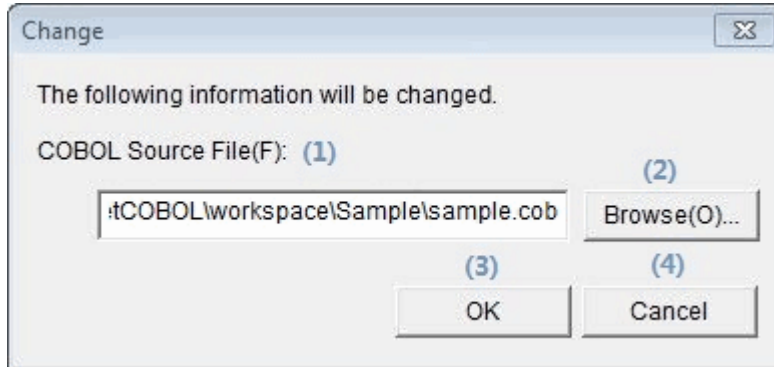
This section explains each dialog of Accumulation.

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6.5.5 Change Dialog



No.	Item	Description
(1)	The item to change(F)	This dialog is used to change "The save location of the COBOL source file", "The output destination of the CSV file", and "The save location of the exclusion statement number direction file", depending on which is selected.
(2)	Browse(O)	Clicking this button displays the file selection dialog box. The file to be changed can be specified from the file selection dialog box.
(3)	OK	Click when reflecting the specified file on COUNTLOG.
(4)	Cancel	Click when canceling the change.

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6.9 Viewer

This section explains each window of the Viewer function.

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6.9.2 Viewer Main Window

Line Num...	Source Code	Run Times	Other
98	READ I - 設定前売上ファイル NEXT	6	
99	AT END		
100	MOVE 定数-終了 TO 判定-終了フラグ	1	
101	CONTINUE	1	
102	END-READ.		
103	IF 判定-終了フラグ = 定数-終了	6	
104	THEN		
105	CONTINUE	1	
106	ELSE		
107	COMPUTE 計数-入力件数 = 計数-入力件数 + 1	5	
108	IF (売上01-営業店コード = SPACE)	5	
109	THEN		
110	CONTINUE	0	
111	ELSE		
112	MOVE 定数-選択 TO 判定-選択フラグ	5	
113	END-IF		
114	END-IF.		
115	C 1 1 0 - 出口.		

No.	Item	Settings
(1)	Line Numbers	Displays the actual line numbers of COBOL source files. The display color varies according to the status of the line, such as executed and unexecuted. The icon to the left of executed lines is displayed in green. The icon to the left of unexecuted lines is displayed in grey.
(2)	Source Code	Displays the actual source code of COBOL source files. The display color varies according to the status of the line, such as executed and unexecuted. executed: unexecuted: exclusion statement:
(3)	Run Times	Displays the number of executions of each instruction.
(4)	Other	When an exclusion statement number direction file is specified, the exclusion reason will be displayed.

[Chapter 7 Output File Explanation](#) > [7.1 Form Output \(CSV File\)](#) > 7.1.3 Output Example of Cumulative Execution Instruction Information (When Using an Exclusion Statement Number Direction File)

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7.1.3 Output Example of Cumulative Execution Instruction Information (When Using an Exclusion Statement Number Direction File)

Table 7.7 [Original Header Section]

SIMPLIA TF-EXCOUNTER VXXLXX		Cumulative Execution Instruction Information			Date and Time Created: MM/DD/YYYY HH/MM/SS
Program Name	First date of the accumulated COUNT information file	First time of the accumulated COUNT information file	Last date of the accumulated COUNT information file	Last time of the accumulated COUNT information file	COBOL Source File
JYUCHU	04-23-1999	11:07:27	04-23-1999	11:07:27	C:\Program\JYUCHU.cob

Table 7.8 [Simple Header Section]

Form Type	Program Name	Test Case Name	COBOL Source File	Exclusion Statement
Cumulative Execution Instruction Information	JYUCHU	-	JYUCHU.cob	JYUCHU.end

Not Executed Mark	Line Numbers	Source Code	Exclusion Reason	Run Times
	110	PROCEDURE DIVISION JYUCHU		
	111	PERFORM INITIAL PROCESSING.		1
	112	PERFORM UNTIL ENDING FLAG = CONSTANT - ON		1
	113	PERFORM MAIN PROCESSING	# Is the test case of an error system	0
	114	END-PERFORM.		
	115	PERFORM END PROCESSING.		1
		:		
		:		

	Number of	Number of	Instruction
--	-----------	-----------	-------------

Number of Test Cases	Total Number of Instructions	Execution Instructions	Unexecuted Instructions	Execution Coverage
1	30	30	10	100.00%

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7.1.5 Output Example of Individual Execution Instruction Information

* When using an exclusion statement number direction file, the exclusion reason is output to the detail section as is the case with cumulative execution instruction information.

Table 7.13 [Original Header Section]

SIMPLIA TF-EXCOUNTER VXXLXX	Individual Execution Instruction Information	Date and Time Created: MM/DD/YYYY HH/MM/SS
-----------------------------	----------------------------------------------	--------------------------------------------------

Program Name	Test Case Name	First date of the accumulated COUNT information file	First time of the accumulated COUNT information file	Last date of the accumulated COUNT information file	Last time of the accumulated COUNT information file	COBOL Source File
JYUCHU	JYUCHU_CASE1	04-23-1999	11:07:27	04-23-1999	11:07:27	C:\Program\JYUCHU.cob

Table 7.14 [Simple Header Section]

Form Type	Program Name	Test Case Name	COBOL Source File	Exclusion Statement
Individual Execution Instruction Information	JYUCHU	JYUCHU_CASE1	JYUCHU.cob	-

Not Executed Mark	Line Numbers	Source Code	Run Times
	110	PROCEDURE DIVISION JYUCHU	
	111	PERFORM INITIAL PROCESSING.	1
	112	PERFORM UNTIL ENDING FLAG = CONSTANT - ON	1
X	113	PERFORM MAIN PROCESSING	0
	114	END-PERFORM.	
	115	PERFORM END PROCESSING.	1
		:	
		:	

Number of Test Cases	Total Number of Instructions	Number of Execution Instructions	Number of Unexecuted Instructions	Instruction Execution Coverage
1	40	30	10	75.00%

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6.1.4 [Options] Menu

[Settings\(S\)](#)

No.	Item	Description
1	Settings(S)	Displays the Settings window .

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6.7 Form Output

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6.8 Creating an Exclusion Statement Number Direction File

This section explains the window for the exclusion statement number direction file creation function.


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6.4.1 [File] Menu

A rectangular button with a light gray background and a thin black border. The text "Close The File(C)" is centered in a black sans-serif font.

No.	Item	Description
1	Close The File(C)	Closes the open Viewer window.

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6.4.5 Toolbar



No.	Item	Description
1	TF-EXCOUNTER Help	Displays the user's guide.
2	Version Information	Displays information about the product version.

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6.6 Opening COUNTLOG Files

Explains the Open COUNTLOG File dialog.

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7.1.4 Individual Execution Instruction Information

Table 7.9 [Original Header Section]

[Product Name]	[Form Type]	[Date and Time Created]				
Program Name	Test Case Name	First date of the accumulated COUNT information file	First time of the accumulated COUNT information file	Last date of the accumulated COUNT information file	Last time of the accumulated COUNT information file	COBOL source file

No.	Edit Item	Details of Editing
1	Product Name	Edit the product name.
2	Form Type	Edit the form type.
3	Date and time created	Edit the date and time of CSV file creation.
4	Program Name	Edit the program name of the specified COUNTLOG file.
5	Test Case Name	Edit the test case name output using Form Output.
6	First date of the accumulated COUNT information file	Edit the date of the initially accumulated COUNT information.
7	First time of the accumulated COUNT information file	Edit the time of the initially accumulated COUNT information.
8	Last date of the accumulated COUNT information file	Edit the date of the final accumulated COUNT information.
9	Last time of the	Edit the time of the final accumulated

	accumulated COUNT information file	COUNT information.
10	COBOL Source File	Edit the COBOL source file name specified using Form Output.

Table 7.10 [Simple Header Section]

Form Type	Program Name	Test Case Name	COBOL Source File	Exclusion Statement
-----------	--------------	----------------	-------------------	---------------------

No.	Edit Item	Details of Editing
1	Form Type	Edit the form type of the output form.
2	Program Name	Edit the program name of the specified COUNTLOG file.
3	Test Case Name	Edit the test case name output using Form Output.
4	COBOL Source File	Edit the COBOL source file name specified using Form Output. Only COBOL source file names are output.
5	Exclusion Statement	Edit the exclusion statement number direction file name specified using Form Output. When exclusion statement information is not specified, "-" is displayed. Only exclusion statement number direction file names are output.

Table 7.11 [Detail Section]

Not Executed Mark	Line Numbers	Source Code	Exclusion Reason	Run Times
-------------------	--------------	-------------	------------------	-----------

No.	Edit Item	Details of Editing
1	Not Executed Mark	Edit the not executed mark based on the cumulative run times. - In the case of an unexecuted line ... X Note: Unexecuted lines are the lines for which the run times is zero after COUNT information is accumulated.
2	Line Numbers	Edit the line numbers of COBOL source files.

		Only PROCEDURE DIVISION can be edited.
3	Source Code	Edit the source code of COBOL source files. Only PROCEDURE DIVISION can be edited.
4	Exclusion Reason	When an exclusion statement number direction file is specified and is the target of exclusion, edit the exclusion reason so that it begins with "#".
5	Run Times	Edit the cumulative number of run times.

Table 7.12 [Footer Section]

Number of Test Cases	Total Number of Instructions	Number of Execution Instructions	Number of Unexecuted Instructions	Instruction Execution Coverage	Insert Lines	Delete Lines
----------------------	------------------------------	----------------------------------	-----------------------------------	--------------------------------	--------------	--------------

No.	Edit Item	Details of Editing
1	Number of Test Cases	Edit the number of test cases in COUNTLOG.
2	Total number of instructions	Edit the total number of instructions of COBOL source files. Only PROCEDURE DIVISION can be edited and exclusion statements are excluded.
3	Number of execution instructions	Edit the number of executed instructions.
4	Number of unexecuted instructions	Edit the number of unexecuted instructions.
5	Instruction execution coverage	Calculated by dividing Number of execution instructions by Total number of instructions.
6	Insert Lines	Edit the number of insert lines of the accumulated test cases.
7	Delete Lines	Edit the number of delete lines of the accumulated test cases.



Regarding Exclusion Statement and Total number of instructions, Number of execution instructions, Number of unexecuted instructions, and Instruction execution coverage

When "Use exclusion statements" is checked, line numbers directed in exclusion statement number direction files do not become the target of Total number of instructions, Number of execution instructions, or Number of unexecuted instructions.

Therefore, when the line numbers for all unexecuted instructions are directed in an exclusion statement number direction file, the instruction execution coverage will be 100%.

2. The display format at the date and time of creation is the following according to the setting of the region and the language.

[Format]: Japanese [Display language]: English YYYY/MM/DD HH:MM:SS
 [Display language]: Japanese YYYY年MM月DD日

HH時MM分SS秒

[Format]: English [Display language]: English MM/DD/YYYY
 HH:MM:SS

[Display language]: Japanese MM/DD/YYYY

HH:MM:SS

[Format]: other than Japanese and English

[Display language]: English MM/DD/YYYY

HH:MM:SS

[Display language]: Japanese YYYY年MM月DD日

HH時MM分SS秒

The display format of accumulation COUNT first time information File date and final accumulation COUNT information File date is the following.

[Format]: Japanese [Display language]: English YYYY-MM-DD HH:MM:SS
 [Display language]: Japanese YYYY-MM-DD

HH:MM:SS

[Format]: English [Display language]: English MM-DD-YYYY
 HH:MM:SS

[Display language]: Japanese MM-DD-YYYY

HH:MM:SS

[Format]: other than Japanese and English

[Display language]: English MM-DD-YYYY

HH:MM:SS

[Display language]: Japanese YYYY-MM-DD

HH:MM:SS

 **Note**



Regarding Exclusion Reason

Exclusion reasons are only output when "Use exclusion statements" is checked.

Note that exclusion reasons are not output when the check of "Use exclusion statements" is removed.



Regarding Insert Lines and Delete Lines

The edited insert lines and delete lines are output only when the type is COBOL and the accumulation mode is NUMBER.

Note that they are not output in other modes.

When the accumulation mode is NUMBER, the insert lines and delete lines of forms that are first output after accumulating COUNTLOG files become "0".

The information of insert lines and delete lines will be reflected on the output form by correcting the COBOL source and accumulating again.

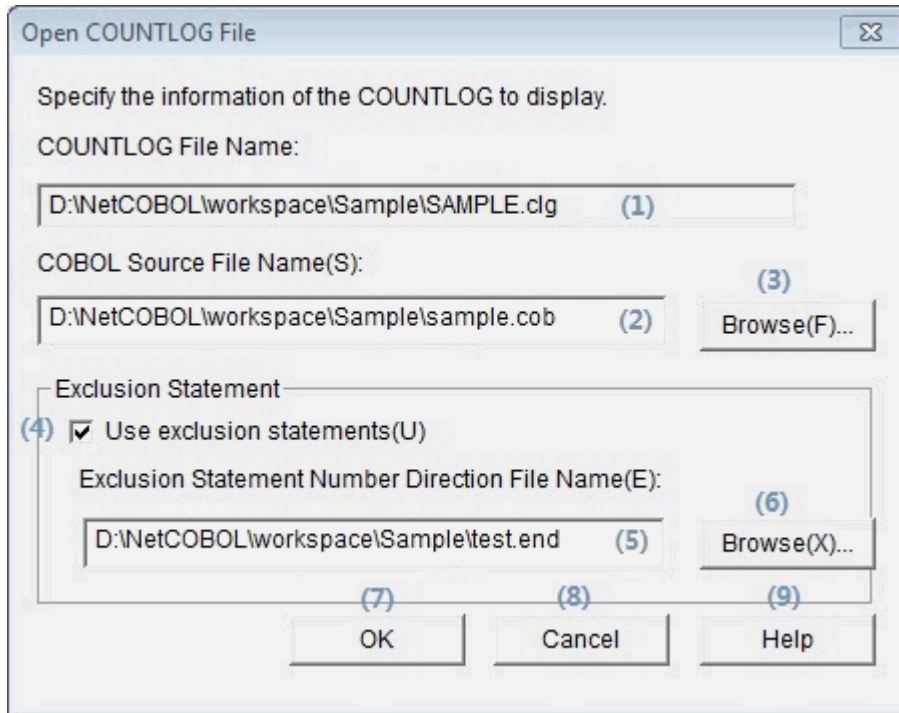


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6.6.1 Open COUNTLOG File Dialog



No.	Item	Settings
(1)	COUNTLOG File Name	Displays the names of COUNTLOG files that are being used.
(2)	COBOL Source File Name(S)	Specify the COBOL source file that includes the target program. When a file exists in the current folder set in the Settings window , specification using only the file name is also possible.
(3)	Browse(F)	Clicking this button displays the file selection dialog box. Specify a COBOL source file from the file selection dialog box.
(4)	Use exclusion statements(U)	Check when using an exclusion statement number direction file.
(5)	Exclusion Statement Number Direction File Name(E)	Specify an exclusion statement number direction file. When a file exists in the current folder set in the Settings window ,

		specification using only the file name is also possible.
(6)	Browse(X)	Clicking this button displays the file selection dialog box. Exclusion statement number direction files can be specified from the file selection dialog box.
(7)	OK	Click when displaying the instruction execution coverage information on the Main Window .
(8)	Cancel	Clicking this cancels processing.
(9)	Help	Clicking this displays the user's guide.

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6.4.2 [Edit] Menu

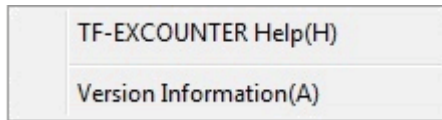
Jump(J)...

No.	Item	Description
1	Jump(J)	Displays the Jump dialog. Moves the cursor to the specified line number.

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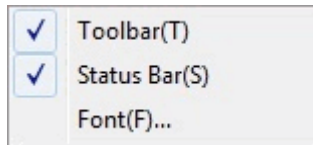
6.4.4 [Help] Menu



No.	Item	Description
1	TF-EXCOUNTER Help(H)	Displays the user's guide.
2	Version Information(A)	Displays information about the product version.

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6.4.3 [View] Menu



No.	Item	Description
1	Toolbar(T)	Select whether to display the Toolbar.
2	Status Bar(S)	Select whether to display the Status Bar.
3	Font(F)	Set the character font to use in displayed windows.