

CasePlayer2

**ISO 26262
Certified**

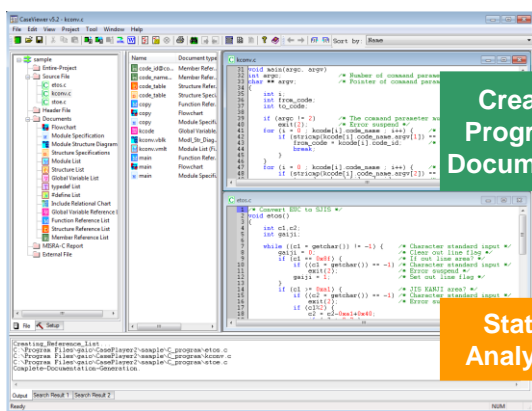
Create program documents and charts

Improve software reliability of newly developed source code

Aids understanding of existing software resources

Certified by TÜV SÜD as a tool that meets the ISO26262/IEC61508 standard

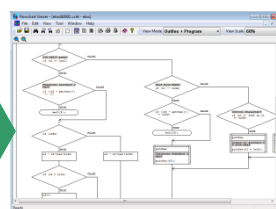
CasePlayer2 is an integrated reverse CASE tool that can create program documents such as flowcharts and MISRA-C reports from analyzing the source code. It includes a Document Browser for easy access to the program documents and source code for review.



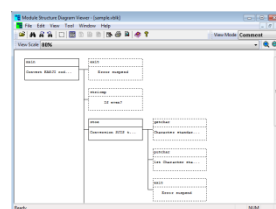
Source Code Editor / Document Viewer

Create
Program
Documents

Static
Analysis



Flowchart



Program Structure Diagram

Name	Item Class	Type	Initial Value	Definition File	Line	Comment
g_global	extern	int	main.c	10	character set	
g_counter	extern	int	main.c	20	context type	
g_flag	extern	bool	main.c	30	string length	
g_string	extern	char	main.c	40	string content	
g_ptr	extern	void*	main.c	50	pointer to data	
g_ptr2	extern	void*	main.c	60	pointer to data	
g_ptr3	extern	void*	main.c	70	pointer to data	
g_ptr4	extern	void*	main.c	80	pointer to data	
g_ptr5	extern	void*	main.c	90	pointer to data	
g_ptr6	extern	void*	main.c	100	pointer to data	
g_ptr7	extern	void*	main.c	110	pointer to data	
g_ptr8	extern	void*	main.c	120	pointer to data	
g_ptr9	extern	void*	main.c	130	pointer to data	
g_ptr10	extern	void*	main.c	140	pointer to data	
g_ptr11	extern	void*	main.c	150	pointer to data	
g_ptr12	extern	void*	main.c	160	pointer to data	
g_ptr13	extern	void*	main.c	170	pointer to data	
g_ptr14	extern	void*	main.c	180	pointer to data	
g_ptr15	extern	void*	main.c	190	pointer to data	
g_ptr16	extern	void*	main.c	200	pointer to data	
g_ptr17	extern	void*	main.c	210	pointer to data	
g_ptr18	extern	void*	main.c	220	pointer to data	
g_ptr19	extern	void*	main.c	230	pointer to data	
g_ptr20	extern	void*	main.c	240	pointer to data	
g_ptr21	extern	void*	main.c	250	pointer to data	
g_ptr22	extern	void*	main.c	260	pointer to data	
g_ptr23	extern	void*	main.c	270	pointer to data	
g_ptr24	extern	void*	main.c	280	pointer to data	
g_ptr25	extern	void*	main.c	290	pointer to data	
g_ptr26	extern	void*	main.c	300	pointer to data	
g_ptr27	extern	void*	main.c	310	pointer to data	
g_ptr28	extern	void*	main.c	320	pointer to data	
g_ptr29	extern	void*	main.c	330	pointer to data	
g_ptr30	extern	void*	main.c	340	pointer to data	
g_ptr31	extern	void*	main.c	350	pointer to data	
g_ptr32	extern	void*	main.c	360	pointer to data	
g_ptr33	extern	void*	main.c	370	pointer to data	
g_ptr34	extern	void*	main.c	380	pointer to data	
g_ptr35	extern	void*	main.c	390	pointer to data	
g_ptr36	extern	void*	main.c	400	pointer to data	
g_ptr37	extern	void*	main.c	410	pointer to data	
g_ptr38	extern	void*	main.c	420	pointer to data	
g_ptr39	extern	void*	main.c	430	pointer to data	
g_ptr40	extern	void*	main.c	440	pointer to data	
g_ptr41	extern	void*	main.c	450	pointer to data	
g_ptr42	extern	void*	main.c	460	pointer to data	
g_ptr43	extern	void*	main.c	470	pointer to data	
g_ptr44	extern	void*	main.c	480	pointer to data	
g_ptr45	extern	void*	main.c	490	pointer to data	
g_ptr46	extern	void*	main.c	500	pointer to data	
g_ptr47	extern	void*	main.c	510	pointer to data	
g_ptr48	extern	void*	main.c	520	pointer to data	
g_ptr49	extern	void*	main.c	530	pointer to data	
g_ptr50	extern	void*	main.c	540	pointer to data	
g_ptr51	extern	void*	main.c	550	pointer to data	
g_ptr52	extern	void*	main.c	560	pointer to data	
g_ptr53	extern	void*	main.c	570	pointer to data	
g_ptr54	extern	void*	main.c	580	pointer to data	
g_ptr55	extern	void*	main.c	590	pointer to data	
g_ptr56	extern	void*	main.c	600	pointer to data	
g_ptr57	extern	void*	main.c	610	pointer to data	
g_ptr58	extern	void*	main.c	620	pointer to data	
g_ptr59	extern	void*	main.c	630	pointer to data	
g_ptr60	extern	void*	main.c	640	pointer to data	
g_ptr61	extern	void*	main.c	650	pointer to data	
g_ptr62	extern	void*	main.c	660	pointer to data	
g_ptr63	extern	void*	main.c	670	pointer to data	
g_ptr64	extern	void*	main.c	680	pointer to data	
g_ptr65	extern	void*	main.c	690	pointer to data	
g_ptr66	extern	void*	main.c	700	pointer to data	
g_ptr67	extern	void*	main.c	710	pointer to data	
g_ptr68	extern	void*	main.c	720	pointer to data	
g_ptr69	extern	void*	main.c	730	pointer to data	
g_ptr70	extern	void*	main.c	740	pointer to data	
g_ptr71	extern	void*	main.c	750	pointer to data	
g_ptr72	extern	void*	main.c	760	pointer to data	
g_ptr73	extern	void*	main.c	770	pointer to data	
g_ptr74	extern	void*	main.c	780	pointer to data	
g_ptr75	extern	void*	main.c	790	pointer to data	
g_ptr76	extern	void*	main.c	800	pointer to data	
g_ptr77	extern	void*	main.c	810	pointer to data	
g_ptr78	extern	void*	main.c	820	pointer to data	
g_ptr79	extern	void*	main.c	830	pointer to data	
g_ptr80	extern	void*	main.c	840	pointer to data	
g_ptr81	extern	void*	main.c	850	pointer to data	
g_ptr82	extern	void*	main.c	860	pointer to data	
g_ptr83	extern	void*	main.c	870	pointer to data	
g_ptr84	extern	void*	main.c	880	pointer to data	
g_ptr85	extern	void*	main.c	890	pointer to data	
g_ptr86	extern	void*	main.c	900	pointer to data	
g_ptr87	extern	void*	main.c	910	pointer to data	
g_ptr88	extern	void*	main.c	920	pointer to data	
g_ptr89	extern	void*	main.c	930	pointer to data	
g_ptr90	extern	void*	main.c	940	pointer to data	
g_ptr91	extern	void*	main.c	950	pointer to data	
g_ptr92	extern	void*	main.c	960	pointer to data	
g_ptr93	extern	void*	main.c	970	pointer to data	
g_ptr94	extern	void*	main.c	980	pointer to data	
g_ptr95	extern	void*	main.c	990	pointer to data	
g_ptr96	extern	void*	main.c	1000	pointer to data	
g_ptr97	extern	void*	main.c	1010	pointer to data	
g_ptr98	extern	void*	main.c	1020	pointer to data	
g_ptr99	extern	void*	main.c	1030	pointer to data	
g_ptr100	extern	void*	main.c	1040	pointer to data	
g_ptr101	extern	void*	main.c	1050	pointer to data	
g_ptr102	extern	void*	main.c	1060	pointer to data	
g_ptr103	extern	void*	main.c	1070	pointer to data	
g_ptr104	extern	void*	main.c	1080	pointer to data	
g_ptr105	extern	void*	main.c	1090	pointer to data	
g_ptr106	extern	void*	main.c	1100	pointer to data	
g_ptr107	extern	void*	main.c	1110	pointer to data	
g_ptr108	extern	void*	main.c	1120	pointer to data	
g_ptr109	extern	void*	main.c	1130	pointer to data	
g_ptr110	extern	void*	main.c	1140	pointer to data	
g_ptr111	extern	void*	main.c	1150	pointer to data	
g_ptr112	extern	void*	main.c	1160	pointer to data	
g_ptr113	extern	void*	main.c	1170	pointer to data	
g_ptr114	extern	void*	main.c	1180	pointer to data	
g_ptr115	extern	void*	main.c	1190	pointer to data	
g_ptr116	extern	void*	main.c	1200	pointer to data	
g_ptr117	extern	void*	main.c	1210	pointer to data	
g_ptr118	extern	void*	main.c	1220	pointer to data	
g_ptr119	extern	void*	main.c	1230	pointer to data	
g_ptr120	extern	void*	main.c	1240	pointer to data	
g_ptr121	extern	void*	main.c	1250	pointer to data	
g_ptr122	extern	void*	main.c	1260	pointer to data	
g_ptr123	extern	void*	main.c	1270	pointer to data	
g_ptr124	extern	void*	main.c	1280	pointer to data	
g_ptr125	extern	void*	main.c	1290	pointer to data	
g_ptr126	extern	void*	main.c	1300	pointer to data	
g_ptr127	extern	void*	main.c	1310	pointer to data	
g_ptr128	extern	void*	main.c	1320	pointer to data	
g_ptr129	extern	void*	main.c	1330	pointer to data	
g_ptr130	extern	void*	main.c	1340	pointer to data	
g_ptr131	extern	void*	main.c	1350	pointer to data	
g_ptr132	extern	void*	main.c	1360	pointer to data	
g_ptr133	extern	void*	main.c	1370	pointer to data	
g_ptr134	extern	void*	main.c	1380	pointer to data	
g_ptr135	extern	void*	main.c	1390	pointer to data	
g_ptr136	extern	void*	main.c	1400	pointer to data	
g_ptr137	extern	void*	main.c	1410	pointer to data	
g_ptr138	extern	void*	main.c	1420	pointer to data	
g_ptr139	extern	void*	main.c	1430	pointer to data	
g_ptr140	extern	void*	main.c	1440	pointer to data	
g_ptr141	extern	void*	main.c	1450	pointer to data	
g_ptr142	extern	void*	main.c	1460	pointer to data	
g_ptr143	extern	void*	main.c	1470	pointer to data	
g_ptr144	extern	void*	main.c	1480	pointer to data	
g_ptr145	extern	void*	main.c	1490	pointer to data	
g_ptr146	extern	void*	main.c	1500	pointer to data	
g_ptr147	extern	void*	main.c	1510	pointer to data	
g_ptr148	extern	void*	main.c	1520	pointer to data	
g_ptr149	extern	void*	main.c	1530	pointer to data	
g_ptr150	extern	void*	main.c	1540	pointer to data	
g_ptr151	extern	void*	main.c	1550	pointer to data	
g_ptr152	extern	void*	main.c	1560	pointer to data	
g_ptr153	extern	void*	main.c	1570	pointer to data	
g_ptr154	extern	void*	main.c	1580	pointer to data	
g_ptr155	extern	void*	main.c	1590	pointer to data	
g_ptr156	extern	void*	main.c	1600	pointer to data	
g_ptr157	extern	void*	main.c	1610	pointer to data	
g_ptr158	extern	void*	main.c	1620	pointer to data	
g_ptr159	extern	void*	main.c	1630	pointer to data	
g_ptr160	extern	void*	main.c	1640	pointer to data	
g_ptr161	extern	void*	main.c	1650	pointer to data	
g_ptr162	extern	void*	main.c	1660	pointer to data	
g_ptr163	extern	void*	main.c	1670	pointer to data	
g_ptr164	extern	void*	main.c	1680	pointer to data	
g_ptr165	extern	void*	main.c	1690	pointer to data	
g_ptr166	extern	void*	main.c	1700	pointer to data	
g_ptr167	extern	void*	main.c	1710	pointer to data	
g_ptr168	extern	void*	main.c	1720	pointer to data	
g_ptr169	extern	void*	main.c	1730	pointer to data	
g_ptr170	extern	void*	main.c	1740	pointer to data	
g_ptr171	extern	void*	main.c	1750	pointer to data	
g_ptr172	extern	void*	main.c	1760	pointer to data	
g_ptr173	extern	void*	main.c	1770	pointer to data	
g_ptr174	extern	void*	main.c	1780	pointer to data	
g_ptr175	extern	void*	main.c	1790	pointer to data	
g_ptr176	extern	void*	main.c	1800	pointer to data	
g_ptr177	extern	void*	main.c	1810	pointer to data	
g_ptr178	extern	void*	main.c	1820	pointer to data	
g_ptr179	extern	void*	main.c	1830	pointer to data	
g_ptr180	extern	void*	main.c	1840	pointer to data	
g_ptr181	extern	void*	main.c	1850	pointer to data	
g_ptr182	extern	void*	main.c	1860	pointer to data	
g_ptr183	extern	void*	main.c	1870	pointer to data	
g_ptr184	extern	void*	main.c	1880	pointer to data	
g_ptr185	extern	void*	main.c	1890	pointer to data	
g_ptr186	extern	void*	main.c	1900	pointer to data	
g_ptr187	extern	void*	main.c	1910	pointer to data	
g_ptr188	extern	void*	main.c	1920	pointer to data	
g_ptr189	extern	void*	main.c	1930	pointer to data	
g_ptr190	extern	void*	main.c	1940	pointer to data	
g_ptr191	extern	void*	main.c	1950	pointer to data	
g_ptr192	extern	void*	main.c	1960	pointer to data	
g_ptr193	extern	void*	main.c	1970	pointer to data	
g_ptr194	extern	void*	main.c	1980	pointer to data	
g_ptr195	extern	void*	main.c	1990	pointer to data	
g_ptr196	extern	void*	main.c	2000	pointer to data	
g_ptr197	extern	void*	main.c	2010	pointer to data	
g_ptr198	extern	void*	main.c	2020	pointer to data	
g_ptr199	extern	void*	main.c	2030	pointer to data	
g_ptr200	extern	void*	main.c	2040	pointer to data	
g_ptr201	extern	void*	main.c	2050	pointer to data	
g_ptr202	extern	void*	main.c	2060	pointer to data	
g_ptr203	extern	void*	main.c	2070	pointer to data	
g_ptr204	extern	void*	main.c	2080	pointer to data	
g_ptr205	extern	void*	main.c	2090	pointer to data	
g_ptr206	extern	void*	main.c	2100	pointer to data	
g_ptr207	extern	void*				

Global Variable List

specific - [- sample2.mmm4]

File View Tool Window Help

Sort by Source Point View Mode All Message All file

MISRA-C:2004 Report

Filename	etos.c	
Line #	Rule #	Message

MISRA-C Report

Fast and Easy Program Document Creation

CasePlayer2's analyzer works fast and is easy to use because it reads the actual source code logic without requiring any special comments or #pragma descriptions.

Document Examples:

Flowchart, Module (Function) Specification Sheet, Module Structure Diagram, Module (Function) List, Structure Specification Sheet, Structure List.

Create Global Variable and Structure Reference Lists

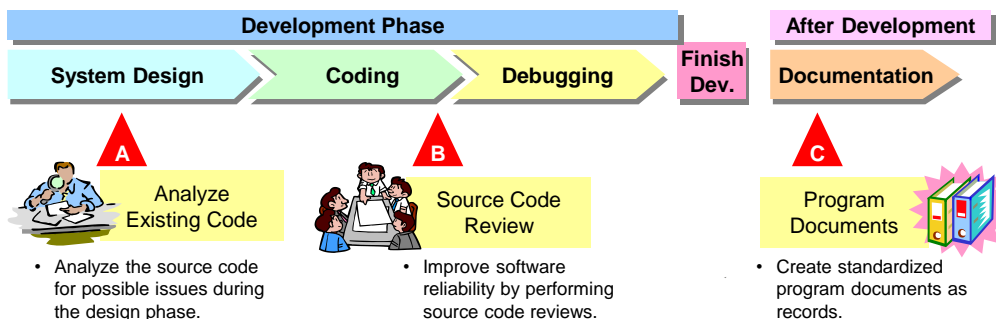
Global variable and structure reference/assignment lists may be created using CasePlayer2. This feature provides a quick reference, and can be useful in finding unexpected read/write errors.

Document Examples:

Global Variable List, typedef List, #define List, Global Variable Reference List, Function Reference List, Structure Reference List, Structure Member Reference List.



CasePlayer2 : Application Examples



CasePlayer2 : User Industry Examples

Automotive



Mobile Phone



Office Appliances



Audio-Video



Digital Camera



Development Service Company



GAIOTECHNOLOGY is the first company to obtain tool certification for the automotive functional safety standard ISO 26262 in the Asia-Pacific region. Tool certification was granted by third-party certification organization TÜV SÜD Germany.

Integrated Reverse CASE Tool for Embedded Development

CasePlayer2 is an integrated reverse CASE tool that can create program documents such as flowcharts and MISRA-C reports from analyzing the source code. It includes a Document Browser for easy access to the program documents and source code for review.

Fast and Easy Program Document Creation

CasePlayer2's analyzer is easy to use because it reads the actual source code logic without requiring any special comments or #pragma descriptions. It is also fast, capable of scanning 10,000 lines of C code in a matter of seconds.

Document Examples

Flowchart, Module (Function) Specification Sheet, Module Structure Diagram, Module (Function) List, Structure Specification Sheet, Structure List.

Create External Variable and Structure Reference Lists

External variable and structure reference/assignment lists may also be created with CasePlayer2. This feature provides a quick reference, and can be useful in finding unexpected read/write external variable and structure errors.

Static Analysis Report Examples

Global Variable List, typedef List, #define List, Global Variable Reference List, Function Reference List, Structure Reference List, Structure Member Reference List.

Printer-Friendly, Customizable, Save Documents in MS-Word / HTML File Format

CasePlayer2 documents are printer friendly, user customizable and may be saved in MS-Word or HTML format for easy access from external applications.

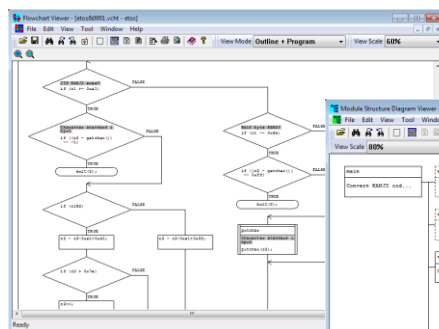
MISRA-C Checker

MISRA-C 1998 & 2004 rule sets for C code checking are supported with configurable options.

Source Metrics

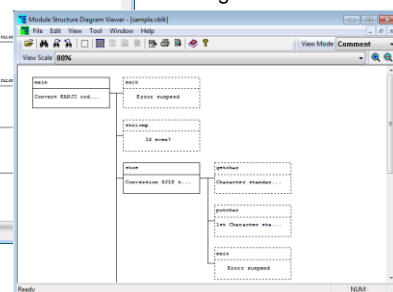
Cyclomatic complexity, Myer's interval, nesting count, code size, number of comment lines, static path count, etc.

Charts



Flowchart

Program Structure Diagram



Global Variable Lists

Global Variable List

Name	Mem Class	Type	Initial Value	Definition File	Line
gb_charset	extern	int		icomn.c	3
gb_contenttype	extern	int		icomn.c	3
gb_strlen	extern	int		icomn.c	3
icode	extern	struct code_table [14]		icomn.c	1

Global Variable Reference List

Specific - Global Variable Reference List - icode			File Edit View Window Help	

MISRA-C Report

Customize Rule Viewer <<MISRA-C:2004>>			
Import...		Save As... Set in Default	
<input type="button" value="All"/> <input type="button" value="Required"/> <input type="button" value="Advisory"/> <input type="button" value="Information"/> <input type="button" value="Nonconformity"/> <input type="button" value="Nonsupport"/> <input type="button" value="Clear"/>			
The rule which is added the example when the code is out of C Guide line for Automobile			
All Items	ID	Type	Rule
1. Environment	1	Required	All code shall conform to ISO 9899:1990, Programming languages - C
2. LAND Option	2	Required	No reliance shall be placed on undefined or unspecified behavior.
3. Documentation	3	Nonsup...	Multiple compilers and/or languages shall only be used if there is a cor...
4. Character Group	4	Required	The compiler/linker shall be checked to ensure that 31 character signa...
5. Identifier	5	Nonsup...	Floating-point implementations should comply with a defined floating-po...
6. Type	6	Required	Assembly language shall be encapsulated and isolated.
7. Constant	7	Required	Source code shall only use /* ... */ style comments.
8. Declaration & Definition	8	Required	The character sequence /* shall not be used within a comment.
9. Initialization	9	Advisory	Sections of code should not be "commented out".
10. Arithmetic conversion	10	Required	All usage of implementation-defined behavior shall be documented.
11. Pointer type Conversion	11	Required	The character set and the corresponding encoding shall be documente...
12. Expression	12	Required	
13. Controlling expression	13	Required	
14. Control Flow	14	Required	

MISRA-C 1998 & 2004 rule sets supported for C code checking

Features

- Document Browser for viewing program documents and source code
- Create a variety of documents including:
Module Structure Diagram, Module Specification Sheet, Structure Specification Sheet, Flowchart, Module List, Structure List, etc.
- Compatible Source Code: ANSI C, embedded C and assembly
- Save documents in MS-Word or HTML file format
- Save charts in BMP or PNG image file format
- Printer-friendly
- Fast and easy to use

System Requirements

- IBM Compatible
- USB port (for USB license key)
- Windows XP, Windows Vista (32-bit), Windows 7 (32/64-bit)
- Hard Drive: 50 MB free space
- Microsoft Internet Explorer 5.5 or newer to view HTML format documents
- Microsoft Word 2000 or newer to view MS-Word format documents