



Manage Software Supply Chain Risk

Critical applications are often delivered as binary executables or loadable libraries, either commercial-off-the-shelf, or built by a third party. These applications control systems that people depend on, often these are embedded devices that control airplanes, cars, power plants and medical equipment. Understanding outstanding risk is of high importance for cyber security teams that are responsible for the protection of these systems. GrammaTech has been a leader in this field for over 15 years with CodeSonar. CodeSonar can reverse engine native binary applications and firmware and perform static application security testing (SAST) on them to find previously unknown weaknesses and vulnerabilities.

Find Vulnerabilities In Third Party Binary Code

GrammaTech's binary code static analysis technology doesn't rely on debugging or symbol-table information. It can examine stripped binary executables that third-party software vendors typically ship. With this capability, CodeSonar enables you to perform a security audit on software without cooperation from the vendor.

Abstract Interpretation

GrammaTech SAST tools use the concept of abstract interpretation to statically examine all the paths through the application and understand the values of variables and how they impact program state.

DATASHEET

Code Understanding

Finding vulnerabilities is not sufficient, the developer needs to understand how the problems that have been uncovered fit into the wider application. CodeSonar provides comprehensive code understanding capabilities, helping developers understand issues rapidly.

Mixed Mode and Decompiler

CodeSonar for Binaries can analyze applications that are a combination of C/C++ and linked objects or libraries, and analyzes code path that transition the source to binary boundary.

	Event 3: Inside messaet (), curve->order is set to NULL, where curve is &curve_lcl. Dereferenced later, causing the null pointer dereference. See related event 2. A ▼ hide
#0 #0	endif mdif /* IWOLFSSL_SP_MATH */
*	if (in -= NULL r -= NULL s -= NULL key -= NULL rng == NULL) {
	return ECC_BAD_ARG_E;
	}
	/* is this a private key? */
ĸ	if (key->type != ECC PRIVATEKEY \$\$ key->type != ECC PRIVATEKEY ONLY) {
	return ECC BAD ARG E:
)
	/* is the IDX valid ? */

if (wc_ecc_is_valid_idx(key->idx) != 1) { return ECC_BAD_ARG_E; }

LARE_CURVE_SPECS(curve, 1);

Path Visualization

Shaded background and annotations explain the defect path.

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Call Tree Visualization

To understand how a function fits in the larger application.

Instruction Set Architecture Support

CodeSonar for binaries supports Intel, ARM and Power architecture binaries, with or without debug information. It supports both stripped binaries as well as binaries that are compiled with optimizing compilers.



System Requirements Host: Windows, Linux Hardware: 2+ Cores, 2+GB of RAM, 15+GB of disk ISAs: Intel, ARM, Power

FOR MORE INFORMATION www.grammatech.com