

# Runtime Application Self Protection

Mr. Rahul Suryawanshi<sup>1</sup>, Aniket Sorte<sup>2</sup>, Kunal Sahare<sup>3</sup>, Sahil Tembhare<sup>4</sup>

Associate Professor, Department of Artificial Intelligence<sup>1</sup>

Students, Department of Computer Science and Engineering<sup>2,3,4</sup>

G. H. Raisoni Institute of Engineering and Technology, Nagpur, Maharashtra, India

**Abstract:** *This paper explains the fundamental concepts of Runtime Application Self-Protection Technology (RASP), a relatively new security method whose widespread use is envisaged in the near future. The ongoing focal point of this innovation is on Java and .NET stage weaknesses. In addition to typification, the paper discusses RASP's benefits and drawbacks. Despite its undeniable benefits, it is not an independent and comprehensive solution for software security. RASP provides an effective solution to avoid harmful actions when used in conjunction with tried and true traditional methods. In powerful web-based applications, script infusion weaknesses are exceptionally normal. To provide protection against distinct injection types, the necessary conditions for the production and exploitation of script injection vulnerabilities were examined. The statements were located with their types in the HTML statements using a combination of the host language and object language analysis. The information reliance connection subgraph with source and sink focuses was produced in light of the control stream diagram. For this sub-graph, a filter insertion technique is used to define multiple input data type filtering strategies. Then, using data flow analysis and intelligent filtering before important sink statements, a solution was built.*

**Keywords:** Self-Protection Technology

## REFERENCES

- [1]. Čisar, Petar and Sanja Maravić Čisar. [Online] "The framework of runtime application self-protection technology." 9 February 2017. IEEEExplore. 12 November 2021.
- [2]. Fry, Alexander. [Online] "Runtime Application Self-Protection (RASP), Investigation of the Effectiveness of a RASP Solution in Protecting Known Vulnerable Target Applications." 30 April 2019.
- [3]. Lane, Adrian. "Understanding and Selecting RASP 2019: New Paper." 19 November 2019. Securosis. 20 October 2021.
- [4]. Rapid7. [Online] "Runtime Application Self-Protection (RASP)." n.d.
- [5]. Stock, Andrew van der, et al. [Online]"Top 10 Web Application Security Risks." n.d.
- [6]. David Lindner Chief Information Security Officer [Online] "RASP vs WAF: Why You Need Both a WAF and RASP to Protect Your Web Applications " December 26, 2019.
- [7]. Eric Yuan Sam Malek "A Taxonomy and Survey of Self-Protecting Software Systems " Conference: International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS) June 2012.