Author

CAST



**MIPS Reduction Index**

**Detailed Report**

Application Name –

Version –

CAST AIP -

|  |
| --- |
|  |
|  |

Monday, xx July 2012

My Application Name

Version Number

My CAST Version

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# Introduction

Most hardware and software packages in the Mainframe world are licensed based on the size of the machine, or the number of MIPS (Million Instructions per Second). The total cost per MIPS varies between 3,000$ and 5,000$ per year, including all hardware and software costs. Consequently, IT departments everywhere must squeeze greater operational efficiencies out of their systems or face spiraling costs. Also, there are different locations where excessive MIPS usage might be spent. such as – Application Logic, SQL commands, and Data Models.

This assessment is an effort to identify the MIPS reduction opportunity of the application. This assessment uses the CAST Application Intelligence Platform (AIP) to automatically scan the implementation of these applications to review the architecture, design, and code against MIPS reduction rules.

## Application Characteristics

This assessment is focused solely on the technical implementation of the said application (user interface to database), with no investigation of the functionality.

|  |  |
| --- | --- |
| **Name** | **Value** |
| kLoC | 504 |
| Files | 6,586 |
| Classes | 593 |
| SQL Art. | 0 |
| Tables | 119 |

*Fig 1: Application Technology characteristics Table 1: Application characteristics*

# Security Violation Overview

This section provides a summary of the most severe security vulnerability identified in the structural quality analysis and measurement by CAST AIP against the MIPS (Million Instructions Per Second) Reduction Index.

## MIPS Reduction Index vulnerabilities

List of MIPS Reduction rules that had any findings in this application.

|  |  |  |  |
| --- | --- | --- | --- |
| MIPS Reduction | Total Vulnerabilities | Added Vulnerabilities | Removed Vulnerabilities |
| MIPS Reduction – focus on algorithmic costs | 0 | 0 | 0 |
| MIPS Reduction – focus on data access efficiency | 0 | 0 | 0 |
| MIPS Reduction – focus on avoiding transaction failure | 0 | 0 | 0 |

*Table 2: MIPS Reduction Index Rules*

## MIPS Reduction – focus on algorithmic costs

List of vulnerabilities that had any findings in this application.

|  |  |  |  |
| --- | --- | --- | --- |
| CAST Rules | Total Vulnerabilities | Added Vulnerabilities | Removed Vulnerabilities |
| Rule 1 | 0 | 0 | 0 |
| Rule 2 | 0 | 0 | 0 |
| Rule 3 | 0 | 0 | 0 |
| Rule 4 | 0 | 0 | 0 |
| Rule 5 | 0 | 0 | 0 |

*Table 3: MIPS Reduction – focus on algorithmic costs*

## MIPS Reduction – focus on data access efficiency

List of vulnerabilities that had any findings in this application.

|  |  |  |  |
| --- | --- | --- | --- |
| CAST Rules | Total Vulnerabilities | Added Vulnerabilities | Removed Vulnerabilities |
| Rule 1 | 0 | 0 | 0 |
| Rule 2 | 0 | 0 | 0 |
| Rule 3 | 0 | 0 | 0 |
| Rule 4 | 0 | 0 | 0 |
| Rule 5 | 0 | 0 | 0 |

*Table 4: MIPS Reduction – focus on data access efficiency*

## MIPS Reduction – focus on avoiding transaction failure

List of vulnerabilities that had any findings in this application.

|  |  |  |  |
| --- | --- | --- | --- |
| CAST Rules | Total Vulnerabilities | Added Vulnerabilities | Removed Vulnerabilities |
| Rule 1 | 0 | 0 | 0 |
| Rule 2 | 0 | 0 | 0 |
| Rule 3 | 0 | 0 | 0 |
| Rule 4 | 0 | 0 | 0 |
| Rule 5 | 0 | 0 | 0 |

*Table 5: MIPS Reduction – focus on avoiding transaction failure*

# Security Violation Details

## MIPS Reduction – focus on algorithmic costs

|  |
| --- |
| Object name |
| Violation #1 |
| …. |

## MIPS Reduction – focus on data access efficiency

|  |
| --- |
| Object name |
| Violation #1 |
| …. |

## MIPS Reduction – focus on avoiding transaction failure

|  |
| --- |
| Object name |
| Violation #1 |
| …. |

# Appendix

## About CAST Software Intelligence

Software Intelligence creates understanding into software architecture, end to end transaction flows, data access patterns and more, helping teams work confidently and faster. Hundreds of companies rely on CAST Software Intelligence to improve end-user satisfaction and time-to-market, prevent business disruption and reduce cost, enabling them to move past today’s obstacles and to tackle the next wave of innovation.

[Click here](https://www.castsoftware.com/software-intelligence) for more information about CAST Software Intelligence.