

Deadlock Detection & Analysis Report

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Automated Deadlock Detection System
Version 1.0
Advanced Analysis Report

Executive Summary

■ DEADLOCK DETECTED

Metric	Value
Total Processes	3
Total Resources	2
Active Allocations	4
Pending Requests	3
Detected Cycles	2
Detection Time	0ms
ML Risk Score	88.0%

System Overview

Processes

PID	Name
1	P0
2	P1
3	P2

Resources

Resource ID	Total Instances
R1	3
R2	2

Deadlock Detection Results

Deadlock Detected!

Found 2 circular wait cycle(s) in the system.

Detection Time: 0ms

Detected Cycles:

- Cycle 1: 1 → 2 → 1
- Cycle 2: 1 → 3 → 1

Machine Learning Prediction

Deadlock Probability: 88.0%

Risk Level: CRITICAL

Recommendations

- Immediate action required: Apply recovery strategy
- Consider process termination or resource preemption
- Review resource allocation policies
- Implement deadlock prevention strategies:
 - Lock ordering
 - Timeout mechanisms
 - Resource quotas