

# How OverOps Helped Zynga Gain Insights About Errors and Exceptions

Zynga (NASDAQ: ZNGA) is a leading developer of the world's most popular social games that are played by millions of people around the world each day.



## Production Monitoring Ecosystem

**OverOps** **splunk** **Nagios** **DATADOG** **HipChat**

### Key challenges

Zynga had a hard time finding and debugging exceptions, even for their stable applications, due to the massive amount of lines written to the log. Developers needed to sift through logs in hopes of finding the specific issue they had encountered. They needed a tool to help them debug in production.

1.7k

Employees

\$764M

Revenue

### Error Resolution (Pre-OverOps)

There's only some information that fits inside a log line, and it gives a narrow view of what's going on inside the application. As a result, the engineering team had no way of knowing that certain services were failing since there was no logging for uncaught exceptions. The company needed a tool that could help production debugging.

### Error Resolution (With OverOps)

Now with OverOps, Zynga catches all uncaught exceptions including the complete source code and variable state, across the entire call stack. Zynga's engineers can now immediately identify critical errors, and see the exact variable state that caused them.

## Avg. Time to Resolve Production Errors

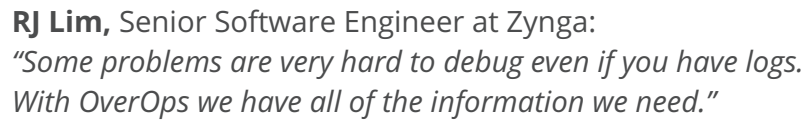
3  
Days



5  
Minutes

99%  
Reduction





- 1 Variable values across the entire call stack for every production error
- 2 Identifies root cause for each error without sifting through logs
- 3 Helps diagnose severity level for each error
- 4 Delivers proactive approach for fixing errors instead of waiting for them to happen

Zynga uses OverOps to detect errors and exceptions within their applications, and also to tidy up the logs themselves and make them meaningful. Instead of ignoring millions of error lines, Zynga can now know what's important, get real-time notifications via HipChat and fix issues as soon as they occur.

The screenshot displays a Java IDE with a sequence of log messages on the left and a database table on the right.

**Log Messages:**

```

ceFirstUsage.checkFirstFlashHit) About to remove all with 0 keys. {DynamoDBMap} [ServiceFir
ceFirstUsage.checkFirstHit] About to get all entries. {DynamoDBMap} [ServiceFirstUsage]
ceFirstUsage.checkFirstHit] About to remove all with 0 keys. {DynamoDBMap} [ServiceFir
on delayed messages, 30001 > 30000. (last: 1473941762981, now: 1473941792982) {QueueDe
essages found. {QueueDelayedMessages}. [SQS-barak_mac_backend_taskforce.17-Local-Queue-
ceFirstUsage.checkDaemonUp] About to get all entries. {DynamoDBMap} [ServiceFirstUsage]
ceFirstUsage.checkDaemonUp] About to remove all with 0 keys. {DynamoDBMap} [ServiceFir
ceFirstUsage.checkAgentUp] About to get all entries. {DynamoDBMap} [ServiceFirstUsage]
ceFirstUsage.checkAgentUp] About to remove all with 0 keys. {DynamoDBMap} [ServiceFir
ceFirstUsage.checkInstall] About to get all entries. {DynamoDBMap} [ServiceFirstUsage]
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ceFirstUsage.checkInstall] About to remove all with 0 keys. {DynamoDBMap} [ServiceFir

```

**Database Table: MoviesValidator.validateMovie**

| id | createdByAgent | modified | titleAdded                    | date | subName        | ironMan 3" |
|----|----------------|----------|-------------------------------|------|----------------|------------|
| 1  |                |          | public domain validated movie |      | long movieCats | 2          |

**Code Snippets:**

```

if (idDemondMovie.getId() == idDemondMovie.getId()) {
    movie.setSubName("IronMan 3", 3);
    movie.setCats(idDemondMovie.getId());
}

MoviesInserter.validateMovie

MoviesInserter.putMoviesInDb

PutMoviesInDbDaemon.work

Daemon.doRun

GracefulTask.internalRun

```