

REDUCING RISK AND INCREASING EFFICIENCY

how a state government agency eliminated the risk of failed business processes by migrating to the cloud

CASE STUDY: CLOUD



OVERVIEW

A state government agency had a desire to exit their on-premise datacenter and move to a cloud environment. The agency was facing high costs, outdated and out-of-warranty hardware, outdated operating systems, security risks, which created the threat of their electronic filing system (EFS) — the heart of their business — failing. With Zirous' help, the agency was able to quickly and securely move to a cloud environment that offers them up-to-date infrastructures, reduced costs, increased security, improved recovery times, and the ability to recover their environment to a different cloud region in case of a catastrophic failure.

THE CHALLENGE

The state agency was spending excessive money in their on-premises hosting facility, and the servers were out of warranty. Along with an outdated operating system, the agency faced multiple security concerns despite paying significant fees for the hosting and management of the environment. If anything were to happen to their system, they would receive no external support and were faced with taking on these risks on their own.

Additionally, their EFS, a completely custom application hosted on this same hardware, was facing potential failure despite being at the center of their business mission. If this application were to fail, operations would come to a complete halt until fixed.

With slow speeds, high costs, security risks, and more, the decision to move to the cloud with Zirous' help was clear.

THE SOLUTION

Zirous' cloud experts were able to develop a cloud adoption and migration strategy that worked for this state agency's people and processes. Zirous rebuilt the environment with updated components, changed the underlying operating system, and migrated the agency's data over a VPN tunnel into the Oracle cloud.

Rebuilding the Environment with Updated Components

In order to rebuild the environment, the Zirous team began with finding the latest versions of each piece of software in the agency's technology stack that were compatible with each other. From there, Zirous built the new environment in the Oracle cloud to utilize the latest infrastructure as a service capabilities. To make everything work cohesively, Zirous updated the custom EFS application from Java 7 to Java 8, updated the agency's database from 11.1.2.0 to 18.0.0.0, and updated the entire Weblogic stack from 11g to 12c.

Changing the Underlying Operating System

To best fit the agency's needs, Zirous updated their underlying operating system from Windows Server 2008 R2 Standard to Oracle Enterprise Linux 7.6. Linux is the preferred system for Weblogic and database environments, and knowing that Zirous would continue to support the agency's new environment going forward, it was a perfect fit; Zirous' experience with Linux includes a vast library of scripts and workarounds for Oracle products within Linux, so this decision was made knowing it would ultimately be the best benefit to the agency.

QUICK FACTS

Company

- State government agency
- Business processes centered around an electronic filing system (EFS)
- Held 350GB of data on at-risk on-premises hardware

Technologies Involved

- Oracle Cloud Infrastructure (OCI)
- Oracle Database 18.0.0.0
- Oracle Weblogic Server 12.2.1.3.0
- Oracle WebCenter Content 12.2.1.3.0
- Oracle Unified Directory 12.2.1.3.0
- Oracle SOA 12.2.1.3.0

HIGHLIGHTS

- A state government agency faced poor speed, security risks, and system failures in their on-premises environment.
- The agency elected to migrate their data and applications to the cloud to increase security and efficiency.
- Zirous migrated 350GB of data to the Oracle Cloud, including user definitions for 2,000 users and approximately 450,000 documents.
- In the cloud, the agency sees improved recovery times, increased security, and reduced costs. They can rest easy knowing they have the ability to rebuild and import backups of the new environment in case of a large-scale failure, keeping their business on track.



Migrating to the Oracle Cloud

Roughly 350GB of data — including database schemas for the agency’s EFS application, user definitions for approximately 2,000 users, and approximately 450,000 documents — needed to be migrated to the new cloud environment. By using a virtual private network (VPN), Zirous was able to securely move the agency’s data through the public internet into the cloud. This VPN will also allow the agency to securely manage and update the servers in this environment without exposing them to the public.

Because the state agency already utilized an Oracle database, the Oracle cloud was chosen as their new environment. The agency’s main goal was to migrate out of the datacenter in a quick and cost-effective manner, and using the Oracle cloud achieved this goal with the fewest disruptions to their business and processes.

THE IMPACT

At the end of the migration, the state agency saw drastically improved recovery times, and they now have the ability to rebuild and import backups of the new environment in case of a large-scale failure. Their costs are significantly reduced, their security risks are minimal, and the threat of their EFS system failing and stopping the operation of their business is eliminated.

