

Saving Time, Improving Quality, and Enhancing Software with Application Support Services

Customer: Carbonite

Size: 1,001-5,000 employees

Region: Boston, MA

Industry: Software Product Company

Profile: A market leader offering software products that allows IT firms to dynamically move, protect, and recover workloads across any distance and combination of both physical and virtual server environments.

Services: Cloud Services

Business Need

Carbonite is the world's leading provider of information availability software and services across multiple operating systems. One of their key products is a web-based Cloud Migration Service Application (CMSA), which enables migrations of Windows servers to Microsoft Azure, VMware vCloud, Amazon Web Services (AWS) and OpenStack target environments. The application also supports Linux migrations.

With the business growing exponentially and the pressing need to deliver more, the company needed their in-house IT staff, which supports their CMSA, to focus solely on the core activities of their business. Simultaneously, they wanted to optimize the support activities for their CMSA, which mainly involved application enhancement and testing. As a solution, the firm decided to outsource the support activities for their CMSA.

The company was in search for a managed services provider of cloud application support, who could provide them a consolidated and robust support model for the administration and maintenance of their CMSA.

Solution and Approach

Carbonite partnered with Synoptek (formerly Indusa) to leverage its cloud application support expertise in increasing the efficiency and performance of their CMSA. After understanding the application's

architecture and considering the unique business requirements and goals of Carbonite, Synoptek deployed the environment to provide application support. The support activities include application enhancement and testing.

Application Enhancement – Synoptek's application enhancement activities ensure that the company gets the most out of their CMSA.

Adhering to agile methodologies, Synoptek uses industry standard development toolsets to enhance the application. The key enhancements involve design improvement, fault analysis and bug fixing, and new feature development.

Using User Interface (UI) technologies such as HTML5, CSS, JavaScript, and Bootstrap, Synoptek enhances the application, such that it matches specific process frameworks of Carbonite, and provides a rich UI experience to its users.

Fault analysis and bug fixing is carried out to analyze and improve the quality of the code. It identifies and eliminates vulnerabilities existing in the code.

New features are frequently developed to address the rising technology challenges and commercial enterprise demands of Carbonite.

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Testing Services –

Application testing is carried out of the company's CMSA, to make sure that the service performs the way it is expected when migration takes place from on-premises to cloud or cloud to cloud.

To ensure a fully functional, stable and secure environment, the application testing process consists of: functional testing, compatibility testing, fault-tolerance testing, and regression testing.

- **Functional testing:** Functional tests ensure that the business requirements are being met by the application. Some of the functional tests are described below:
 - System Verification Test: This test checks that the application meets specifications and fulfills its intended purpose.
 - Interoperability Test: This test ensures that the application has the flexibility to work without any issues in different platforms, and also work seamlessly when moving from cloud infrastructure to another.
- **Compatibility testing:** In this test, instances of different Operating Systems (OS) are created to check the compatibility of the application with the OS. It ensures that the application is running correctly on the browsers when accessed via a desktop, through mobile, or on a tablet.
- **Fault-tolerance testing:** The main focus is testing the fault tolerance mechanisms. It includes handling temporary failures, disconnections, timeouts, and crash-failures. All these failure modes require certain conditions to occur during normal system execution. A specific test environment is created that is controlled for testing each particular failure mode.

- **Regression testing:** It is performed to make sure that any change in the code or addition of the new feature hasn't broken any existing functionality of the application. Its purpose is to catch bugs that are accidentally introduced into a new build, and to ensure that previously eradicated bugs continue to stay dead.

Business Results

By handing off support services for their CMSA to Synoptek (formerly Indusa), the company freed up their in-house IT personnel, to allow them focus on core business activities.

The consistent and continuous application support provided by Synoptek ensures a fast time to resolution with minimal disruption to any of the issues in the application.

Application enhancement ensures that the CMSA remains flexible throughout and has a competitive edge.

With the expert testing services provided by Synoptek, any faults become visible before the new environment goes live. This helps safeguard the mission-critical business processes and data, as the application seamlessly moves workloads to the cloud.

From handling incidents, changes, and defects, to developing new features and testing them, Synoptek's cloud application support services continue to help the software product company utilize their CMSA to its full potential.

About Synoptek

Synoptek is a Global Systems Integrator and Managed IT Services Provider offering Comprehensive IT Management and Consultancy Services to organizations worldwide. Our focus is to provide maximum "business value" to our clients enabling them to grow their businesses, manage their risk/compliance, and increase their competitive position by delivering improved business results.