SUSE

Carhartt

Industry and Location
Retail & Fashion | USA

Product(s) and Service(s)
SUSE Linux Enterprise Server for SAP Applications
SUSE Manager

Carhartt works together with SUSE to achieve zero downtime, saving millions of dollars

Success Story

At-a-Glance

After diversifying the business into direct-to-consumer and direct-to-business offerings, Carhartt wanted to create an omnichannel experience for its customers. To do so, it embarked on a digital transformation project with SUSE that would replace legacy hardware with a cloud-first strategy. The efficiencies this created freed the human and financial resource required to support innovation.

Introducing Carhartt

More than 130 years ago, Hamilton Carhartt began manufacturing overalls for railroad workers to improve working conditions. Today, the brand still operates as a family-owned business whose mission is "To Build Durable Products for Hardworking People." Carhartt now sells workwear through three business areas: wholesale retailers (the predominant side of the business); Direct-to-Consumer (e-commerce; brick-and-mortar stores); and direct-to-business (providing Carhartt company gear to companies in the form of durable uniforms).

Challenge

Since 1889, Carhartt has supported its consumers with quality products and a consistent message about the value of hard work. After 120 years as a wholesaler, the company sought to better reach and expand its consumer base by diversifying operations to include direct-to-consumer and direct-to-business channels. Carhartt's focus on creating better expe-

riences for their customers was far from over. In 2018, they embarked on a digital transformation designed to create an omnichannel experience for their consumers that would be cloud-based, secure and reliable.

By adopting a cloud-first strategy they would replace their AS400 systems in the hopes to enhance functionality & improve availability. The internal data center, where systems resided, were housed in a tight area that was difficult to maintain and would go down, on average, once a month.

"It's a struggle when you're in a small data center to maintain power and environmental controls," explains Tim Masey, vice president of IT infrastructure & security for Carhartt. "When we're down for an hour in any of our distribution and fulfillment areas, we could be losing a million dollars. So, the cost of availability for us was really important in terms of driving our transformation."

Minimizing downtime and service interruptions weren't the only drivers for Carhartt's digital transformation. "AS400s are not as extensible as what can be provided in more modern systems running in the cloud," adds Masey. "We wanted to position our inter-

nal IT team as high-quality service pro-viders throughout the entire organization. We wanted the ability to provide elasticity across the board, leveraging things like Kubernetes and services components. We just wanted to get out of the hardware business."

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Security was also an essential factor in their decision making. "From a security perspective, one of the first things we looked for was the ability to easily manage, secure and harden the operating system to make sure it can work within our security model."

Solution

Carhartt chose enterprise resource planning software, SAP S/4HANA, to help them with inventory management, product manufacturing and product pricing. Staying true to their cloud-first strategy, Carhartt leadership wanted to run SAP S/4HANA in Microsoft Azure. They also needed to find a Linux operating system in order to run their instance of SAP S/4HANA in the cloud.

"We looked at what we needed in order to run SAP S/4HANA effectively in the cloud, starting with looking at the situation from an SAP perspective. Particularly, who is partnering with SAP, and who do they partner with very strongly?" reflects Masey.

Masey spoke with contacts at SAP for their recommended operating system. "Their number one recommendation to us was SUSE," he says. Masey had had experience in working with SUSE at a previous company and felt good about the recommendation. "I knew what SUSE brings to the table. I knew how SUSE approaches the development in the architecture of its environment and of its operating system. And I knew how it ran on the Intel-based platform. I knew how sophisticated it was, and I had compared that to the cost as well."

In the end, Masey and his team selected SUSE Linux Enterprise Server for SAP Applications as their OS of choice. They also selected SUSE Manager as a tool for building and deploying security templates, patches and updates on an on-going basis.

With all the tools and systems selected, the time had come to migrate. The first task was to build a framework that would ensure all systems were secure at launch, but not to the point where security would interrupt growth. "Security has to be an enabler for the business and for technology but cannot impede the progress of business and technology. And that's the challenge. Security is known as the roadblock. 'He can't get through.' 'He can't do this because we got to have somebody approve it.'" says Masey, pulling from his security background.

"So, our goal was to build from the ground up with having security built into each of the operating systems it was deployed, and we worked with multiple teams to be able to do that: the SUSE team, our managed service provider team, the Microsoft team and my own team (from a cybersecurity perspective). We were building out those templates, building out the process for how we're going to manage the secu-

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rity, and building out what was the right security parameters as opposed to trying to lock everything down."

When asked how the migration went, Masey stated that his team felt that they couldn't have done this without the close partnership that SUSE has with SAP and Microsoft, which meant a quick and smooth transition to the cloud. What they found is that SUSE Linux Enterprise Server for SAP Applications is completely interoperable with Azure Cloud, SAP S/4HANA, and a host of legacy systems, making it possible to stand up systems quickly with each design request being met in the process. The ease and efficiency of the build also caused their hardware support team to change their minds about the value of running operations on Linux in the cloud:

"The support team that was supporting the AS400 environment had huge reservations about moving to the cloud. But they basically came back to me and said, 'We couldn't have done this internally. We couldn't have stood up systems as quickly. We couldn't have actually allocated memory and resources as quickly. We couldn't have been able to have a disaster recovery design as quickly.' All of that came into play. And it's

a huge statement from someone who has been supporting AS400s for a long time. For them to say we couldn't have done this in the environment we were using was huge because they just weren't comfortable with making this transition to cloud, making this transition to a Linux operating system being at the heart of our business. Now these same AS400 supporters are my biggest supporters."

SUSE Manager has also had a significant impact on the business, allowing Carhartt to keep their systems running while applying updates to mixed environments and saving millions in the process. "We use SUSE Manager exclusively for rolling out patches, and it's worked really well for us," says Masey. "The guys have been really excited about the tool. They're really excited about the fact that they can push updates out to all of our systems. Patching has simplified compared to what we were doing before. Especially compared to our previous Windows environment—the patches with SUSE are so much easier."

Masey goes on to say, "From the perspective of being able to patch, being able to standard-templatize, being able to make changes that are associated with secu-

rity parameters and then push those out, SUSE Manager is actually one of the main drivers that my team has looked at and said, 'Hey, we really like this product!'"

Results

Carhartt completed their first of two phases this past June, migrating their retail line of business into the cloud. Their plan is to verify everything works according to plan before beginning their second phase—migrating their central, wholesale business to the cloud. Because the systems from the first phase have proven high availability and are easy to manage, the team has been able to redirect their attention into preparing for their second phase, faster than expected. They are already heavily testing the development, role management and security parameters in preparation for this final migration.

"We were probably experiencing a major outage about once a month. Now, those systems are up 24/7, and they've been rock solid," he says, happy to no longer be losing a million dollars each time the systems went down. "We couldn't spend the kind of money needed to provide this level of service with our old systems."

His IT department has also won back trust from internal stakeholders. "What we've seen is the ability to process consistently without interruption or disruption, and that in of itself is winning back a lot of our associates' trust. Before, there were struggles with some of that, and we're winning back some of the trust that our employees and our associates have within IT."

SUSE's interoperability also made a big impression on Masey and his team. "The SUSE

environment has provided extensibility that you just don't have on an AS400. Nobody builds for that kind of environment, anymore. Things like encryption, containerization, database monitoring, protection of the data rights flowing through, as well. Those are things that you just don't have as extensible within the older environment that we were looking for," he says.

"The other thing is from a product delivery perspective. We wanted the ability to integrate to all of our other systems, as well, and that integration is now there. We wanted to get to web services across the board so that the integration with systems is web-services-driven is API-driven, and that's something that we haven't had before. So, we're really excited about all of these areas, and then the potential! We have a planning system that's Kubernetes-based, and the ability for a Kubernetes-based system to integrate into our SAP environments is also something that we're excited about."

This excitement led Masey to look for other ways to leverage SUSE technology. "I've challenged my team to identify other Windows Systems that we can move to SUSE. It's definitely something that we're exploring."

In terms of cost, Masey has a very pragmatic approach. Instead of looking only

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at numbers on a balance sheet, Masey considers opportunity cost and total cost needed to achieve the same level of service if no changes were made.

"When we first started our migration path, the finance team began seeing the costs rise, but we reminded them that had we gone down the path of trying to do this ourselves with high availability and high agility, our costs would have rose considerably because of what we needed to be able to support that kind of environment."

After a few months of implementation, Masey's team has begun to show the costs of cloud management going down. "One of the reasons why is this: when you first get into cloud management, it's a different paradigm for the resources internally. So, we took someone internally and said, 'You're going to be our site reliability engineer, and part of your job is to drive our costs down within the cloud environment.' And we've been able to start doing that consistently."

While reflecting on the new environment, Masey iterates, "To do this yourself, and to do high quality, you really have to spend a lot of money internally to do this. It's not

as if the cloud cost is so much lower than doing it yourself. It's pretty even. But when you consider again that you just don't have the pressure of having those data centers, and getting out of that hardware business... I keep emphasizing that, you know, and that's something that the business understands."

Equipped with the proof points needed to demonstrate value to the business, the dynamic between Masey's team and crucial stakeholders (like finance and company leadership) shifted from suspicious to supportive. As a result, Carhartt is well on its way creating the omnichannel experience they envisioned for their customers; all thanks to the cloud-friendly, secure, and reliable foundation of running SUSE solutions on Azure to support SAP S/4HANA.

Benefits

+ Zero downtime saves the company millions of dollars
+ Stability and simplicity create more time for innovation
+ Patches and updates for a mixed environment are managed from a single point with ease

Find out how SUSE can help you become an innovation hero!

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