

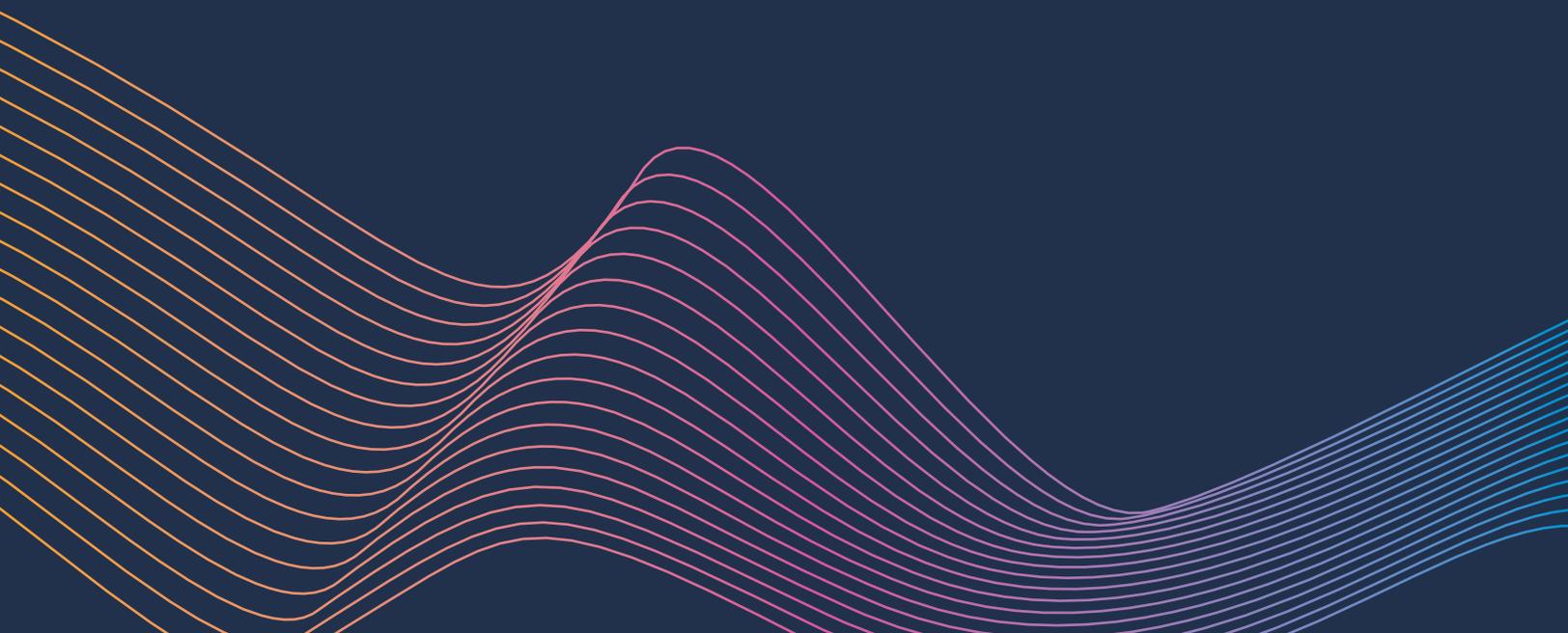
CASE STUDY

# Leading Auto Manufacturer Uses DevOps to Drive Efficiency

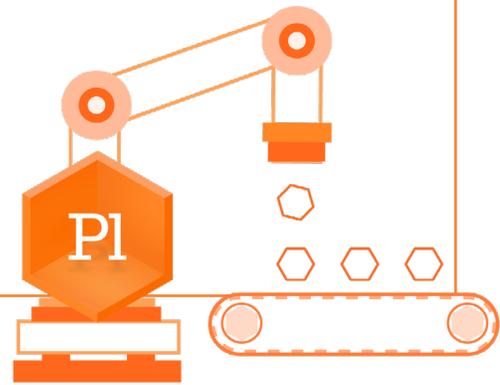
**Transforming a Generations-old Approach  
with Chef Automate and Habitat**



Pipeline



DevOps allows you to maximize your infrastructure to innovate quickly, improve efficiency and compliance adherence while reducing total cost of ownership. It enables you to turn your technology into a strategic advantage that promises to deliver faster and with more accuracy.



## Eliminate Downtime, Deliver Faster and Manage with Confidence

DevOps includes a range of activities from infrastructure deployment, software development, quality assurance to team collaboration, communication and business continuity. With the proper tools, skillsets and processes, you can manage your mission critical infrastructure operations in an agile and reliable way. This case study explores the significant benefits DevOps can offer.

## Company Profile

An American multinational automaker has been servicing clients for generations. As an established business for decades, the company amassed hundreds of technologies and platforms that are managed by various teams.

It became clear to the company that, to increase relevancy and competitive stance, there needed to be changes in their IT stack and operations to deliver products and services to their customers faster and safer than before. To help them transform, they enlisted Chef and Indellient's help to drive their DevOps journey.

"How can we transform to deliver faster, better and more relevant products?"

## The Challenge

Our client is continuously looking for ways to innovate, delight customers with greater experiences, deliver quickly and stay well ahead of competition. The need for speed in innovation is a derivative of the highly competitive environment they work within, where those who quickly innovate and succeed, win.

The largest challenges in rapid innovation for this client are the complex regulations set by the industry combined with the vast number of technologies and differing processes used to manage their supporting infrastructure for new service and product development. The team manages several legacy systems along with Commercial Off-the-Shelf (COTS) applications, creating greater intricacies. The vastness and complexities of their technology footprint required the dedication of entire teams to manage infrastructure day-to-day and continuously fight fires rather than focusing on new product development.

To push forward, the company started to look at how they can properly empower their teams to successfully execute their product development in a timely fashion.

## Summary of the Challenges

01

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### Long Duration to Provision Development Environments

It could take up to 3 months from the moment the development request is entered to the actual launch of the entire environment. Managing and provisioning multiple environments were also time consuming, and cycle-times were lengthy, resulting in scalability issues and delays.

02

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### Manual Processes and Inconsistencies Create Waste and Errors

Legacy restrictions, varying infrastructure, lack of proper documentation and shadow sessions created inconsistencies and cost the company thousands of hours of lost time.

03

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### Compliance Maintenance is Labor-Intensive

Without consolidated, real-time visibility across the complete fleet of servers, it was difficult to guarantee compliance. Audit checks were extremely tedious and long, especially when trying to detect and remediate 0-day vulnerabilities.

04

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### Software Teams Are Not Properly Enabled

They need a better way to provide their teams with the right infrastructure and platforms to execute projects in a timely fashion. There was little time to develop or enhance projects as work here had been stifled by tedious tasks.

## What They Needed

The client needed to optimize how they were managing the lifecycle of several applications, improve scalability and transform their underlying infrastructure and operating system configurations. By doing so, they can reduce time to market and meet lofty business goals. The client looked to DevOps practices to improve operational efficiency.

To begin on their DevOps journey, the client initially focused on:

### **Pipeline Architecture & Optimization**

The company needs to ensure that they can deliver services across multiple environments and data centers in a scalable and manageable way.

### **Compliant and Secure Secret Management**

As discretion for their clients is vital for the company, they needed a method to better keep their “secrets” secure to avoid any risk of applications being compromised.

### **Base OS Hardening & Management**

Operating systems used throughout the company’s data centers need be properly patched, comply with a variety of security standards and include and manage a standard set of base software. This includes the management of operating systems on existing servers that are already living in the “wild”.

### **COTS Application Automation**

The company needed a more robust and efficient way to provision and manage applications throughout the organization including, but not limited to, highly-available clustered databases, data aggregation and monitoring tools, business intelligence and analytics platforms and enterprise content management suites.

## Designing a Solution

To begin, the client enlisted the help of Chef and our team at Indellient. Chef - the leaders in continuous automation - were entrusted with bringing the company to new levels of efficiency and cost control by upgrading their processes and systems to deliver automation and consistency. Our team worked closely with Chef Architects to optimize how the client was using tools like Chef Automate and introduced Habitat by Chef for greater efficiencies.

With this project, Chef and Indellient are helping to achieve:

01

### Scalability

Regardless of the size and scope of their projects, Chef Automate and Habitat can scale to meet the demands of managing multiple environments while managing hundreds of thousands of servers.

02

### Agility

Chef Habitat streamlines the process of packaging applications. It's 'build once, deploy anywhere' capability makes it easy to manage infrastructure and application requirements, no matter how vast and varied they are.

03

### Compliance

Achieving continuous compliance with Chef Automate and InSpec brings a security-first approach to DevOps. The tools provide visibility into the compliance status of the entire infrastructure, automatically produces reports and facilitates the remediation of security vulnerabilities.

04

### Consistency

Chef's suite of tools provide a consistent workflow to accommodate the unique needs of all organizations. Chef agents provide constant configuration while Habitat supervisors maintain the application lifecycle in a consistent and predictable way across all environments, reducing errors and risk.

## A Look Into The Chef Tools Used

The Chef toolset gives organizations a clear, consistent and continuous way to manage infrastructure, regardless of how complex the environment is. Here is a quick look into the two critical tools used in this client engagement.

### habitat

#### Chef Habitat

- An open-source platform
- Enables companies to deliver evergreen application strategy
- Allows for quicker implementation time with less code
- Infrastructure agnostic (build once, deploy anywhere)

### CHEFAUTOMATE

#### Chef Automate

- Streamlines manual configuration processes
- Maintains continuous compliance
- Helps detect, correct and remediate vulnerabilities
- Provides visibility into the state of your entire fleet

## About Chef

We are Chef – the leader in high-velocity IT automation. We give you a model for automating IT infrastructure and applications that drive self-reliance across your development and operations teams. We are the Chef community. We are tens of thousands strong. We are helping your businesses become faster, safer and more flexible, so you win in today's 24x7 digital economy. Join our movement today. [www.chef.io](http://www.chef.io)

## Why Chef?

Using a toolbelt of powerful technologies and industry-trusted expertise, the client can:

### Quickly Provision Environments

Automating with Chef reduces the number of resources and time needed to manage requests. New application environments can come online quickly so business units don't need to be interrupted for patches and updates.

### Enable Consistent Processes and Reduce Cycle-Time

No longer are processes different per environment or team. All processes can be managed through code, providing consistency, testability and significantly reducing cycle-times from months or weeks to mere hours or minutes. Now, the development team can build once and deliver it anywhere.

### Reduce Compliance Risk

Automation, clearly defined processes and immediate updates can significantly reduce business risk. Once complete, real-time visibility into the company's fleet of servers and applications will be provided within a single dashboard to determine if they are compliant. Auditing will no longer take weeks of preparation and stress. In addition, 0-day vulnerabilities can be easily detected and remediated.

### Improve Work Environment and Innovate Culture

Legacy and modern applications, including COTS applications, can easily be managed together, resulting in more consistency, visibility and communication between development and operations. With push-button deployments and fully audited processes, teams can save hundreds of hours a week.

Turning infrastructure into a strategic advantage that promises to quickly deliver value at any scale.

## The Road Ahead

The Fortune 10 company is now one step closer to stepping into the future. With expertise from Indellient and Chef, the company will move hundreds of applications to meet modern standards and transform the organization from top to bottom. Together we are refining the overall DevOps pipeline and accelerating application onboarding.

What will the client gain at the end of their journey?

Thousands of hours per year along with the ability to bring new products and services to market faster at less cost and risk than ever before. Most importantly, they'll attain peace of mind knowing that their applications are always up to spec. Rain or shine, the client is ready to achieve enterprise agility through a DevOps-first approach.

## **Deliver Your Business Applications and Services at Velocity**

At Indellient, our team of experts can help you deliver and manage your infrastructure, applications and security systems quickly and reliably. No matter how vast, varied, complex or secure your environments are, we can manage your infrastructure operations in a compliant, agile and consistent way.

Wherever you are in your DevOps journey, we can help you accelerate to the next level. We can assist you with:

DevOps Assessment, Strategy and Planning

Implementation and Application Onboarding Services

DevOps Managed Services

## About the Indellient DevOps Team

Our DevOps team ensures you can continuously deliver your business applications and services at high velocity. Our experts are certified on and have vast experience with core technologies and methodologies to help you manage mission critical infrastructure operations in an agile and reliable way. Our clients rely on us to maximize infrastructure to innovate quickly, unlock new efficiencies and reduce total cost of ownership.

## About Indellient

As a top Canadian ICT and Profit500 company, we empower businesses to meet and exceed their critical business and technology objectives. We ensure your team has the tools, processes and technology to deliver better outcomes. From SMBs to the Fortune 100, companies rely on us to deliver evidence, clarity and confidence day in and day out – and we can help you get there, one step at a time.

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