elyzium

INSIGHT GUIDE

What benefits does Red Hat Ansible Automation bring to organisations using IBM Software?

elyzium

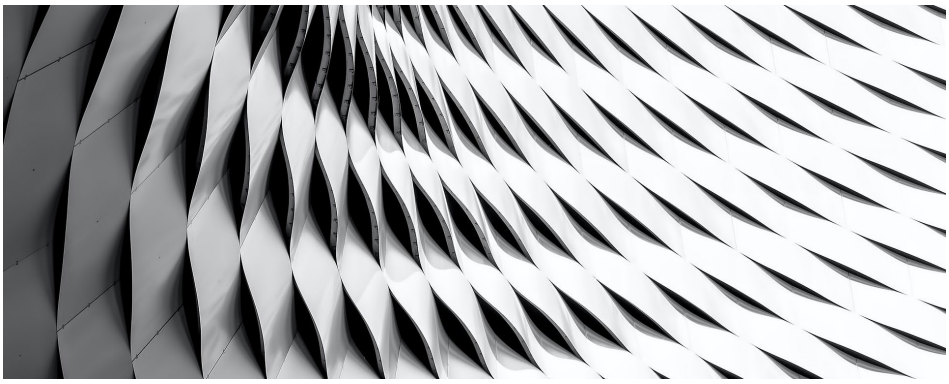
Red Hat
Ansible Automation
Platform

Red Hat
Ready
Business Partner

Gold
Business
Partner
IBM

Insight Guide
Contents

01. IBM Software
is used for business-critical processes



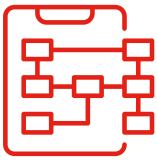
01

IBM Software is designed to solve the most challenging needs of organisations large and small, across all industries, worldwide. It allows customers to build an integrated, smarter, and more responsive business which is intelligent, resilient, flexible and future-proof.

The IBM Software portfolio is vast and complex. IBM middleware specifically enables organisations to seamlessly integrate their business processes, applications and platforms, leading to reduced TCOs and increased ROIs. IBM middleware handles millions of business-critical processes - in tens of thousands of organisations worldwide - on a daily basis.

85%
of the Fortune 100 use IBM MQ[1]

01.1 IBM Software
Examples



1.1 IBM MQ

Keep data flowing with unrivalled reliability

Massive amounts of data move as messages between applications, systems and services at any given time. If an application isn't ready or if there's a service interruption, messages and transactions can be lost or duplicated, costing businesses time and money to make things right.

IBM MQ offers proven, enterprise-grade messaging capabilities that skilfully and safely move information between applications.

Connect
Acting as a messaging center between applications on varied platforms, MQ connects virtually everything wherever it is, reducing integration time and cost, and reliably moving messages.

Protect
Secure by design — with built-in high availability and disaster recovery — MQ protects data at rest, in-flight and in-memory through fine-grained authentication and powerful data encryption.

Simplify
Because MQ handles connection and message retries for you, it frees developers to spend time on more critical initiatives. It also easily scales to seamlessly manage changes in transaction volumes.

1.2 IBM INFOSPHERE DATASTAGE

Extract, transfer and load (ETL) data at scale and in real-time for AI applications in multicloud or hybrid environments

IBM® InfoSphere® DataStage® is an industry-leading cloud-ready data integration solution. It provides real-time delivery of trusted data into data lakes, data warehouses, or any other multi or hybrid cloud environment to feed business-ready data into AI applications. Real-time analytics is easy due to the cloud-native architecture built on containers and microservices.

- ***Reduces workload execution time through multicloud elastic scaling and balancing***
  Workloads run faster and more efficiently with built-in workload balancing and parallel engine to handle high volumes of data on any cloud.
- ***Meet mission critical SLAs***
  Automatic failure detection and resolution automates and accelerates administration tasks, letting users focus on higher value tasks.
- ***Accelerates AI initiatives***
  Reduces the time it takes to deliver AI initiatives and speeds up time to innovate by making high quality data available in real time.
- ***Reduces TCO***
  Improves operational efficiencies with container based deployment and automating CI/CD pipelines for jobs from development to test to production.
- ***Modernizes data warehouses***
  Removes network bottlenecks and optimizes load times with co-located IBM Netezza® or IBM Db2® Warehouse on IBM Cloud Pak for Data System.
- ***Secures data***
  Helps users to avoid data security breaches and reach the right customers at the right time through pervasive data quality and security.

1.3 IBM WORKLOAD AUTOMATION

Optimize and automate complex workloads for greater IT efficiency

IBM® Workload Automation is a complete solution for batch and real-time hybrid workload management, available for distributed, mainframe, or hosted in the cloud. It enables organisations to streamline workload management with an analytics-fuelled solution.

Optimized workload management
Improves decision making by using predictive analytics and centralized management, reducing costs by eliminating manual activities as well as the cost of ownership for your central server.

Improves business agility
Enables greater development agility and integration with DevOps toolchain for business and infrastructure agility.

Simplifies operations
Simplifies the client experience by customizing workload dashboards and providing autonomy and precise governance to application developers and operators with dedicated interfaces for each.

Key Features:

- Powerful and intuitive dashboard
- Workflow folders
- Unleash the power of containers
- Hybrid workload automation
- Streamline your release management process
- Ready-to-use integrations
- Self-service automation
- Advanced rerun flexibility
- Connect jobs using variables
- Scheduling through REST APIs
- Advanced monitoring
- Manage business risk

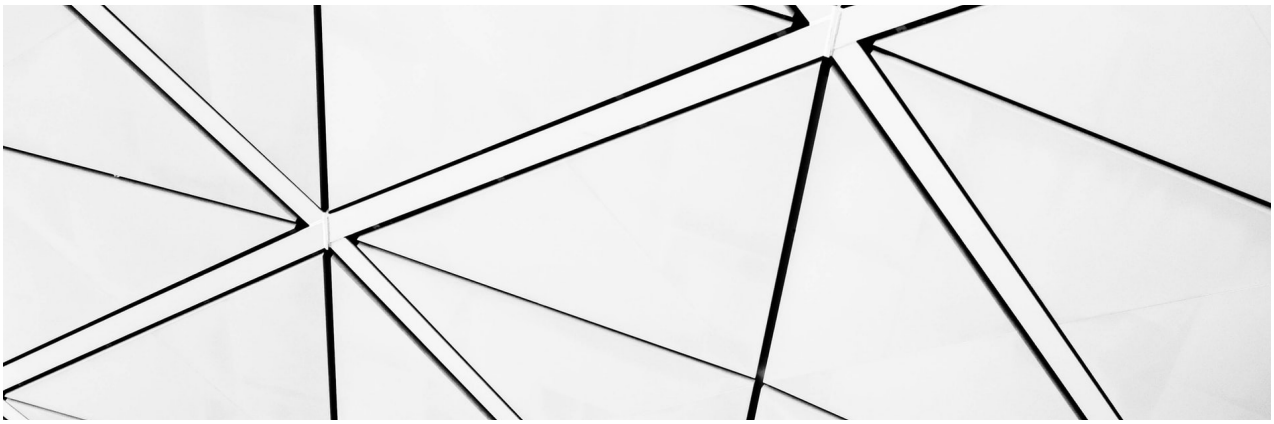
1.4 IBM SECURITY GUARDIUM

Achieve visibility, automation and scalability with smarter data protection

Security and compliance professionals are facing more data, regulations, and security tools than ever before – with obstacles to sensitive data protection growing larger every day. As they aim to protect all types of data from growing threats across diverse on-premises, hybrid, and public cloud environments, how do organisations simplify operations while complying with privacy requirements?

The IBM® Security Guardium® family of data security solutions allows businesses to achieve smarter data protection with a unified set of robust controls. The platform offers actionable insights, real-time controls, and automated compliance support through:

- Data discovery and classification
- Vulnerability scans and risk assessments
- Data activity monitoring and alerting
- Encryption, blocking, masking and quarantining
- Compliance reporting and auditing
- Advanced data security analytics



1.5 IBM WEBSPHERE APPLICATION SERVER

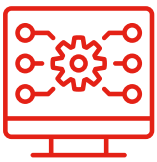
Optimize, create and connect applications on premises and on cloud

IBM® WebSphere® Application Server is a fast, high-performance Java application server that can build, run, integrate, secure and manage dynamic cloud and web applications on-premises, off-premises, or both. Designed for speed and flexibility, it also provides a choice of open-standards programming models for maximum developer productivity. It provides flexible, advanced performance, redundancy and programming models.

- ***Cost optimisation***
  Reduces costs with hybrid capabilities that provide the flexibility to deploy and manage apps across any cloud and any container service.
- ***Available on the cloud***
  Offered in a hosted cloud environment with IBM WebSphere Application Server on Cloud or via flexible licensing options with IBM WebSphere Application Server Family Edition.
- ***Create applications and microservices***
  Allows cloud-native and web-based apps and microservices to be deployed quickly with a lightweight and composable production runtime featuring a single administrative console for Java and Node.js apps and API***s.***
- ***Connects Java applications to the cloud***
  Unlock new value with API lifecycle management and cloud services like IBM Watson®, IBM Cloudant® and IBM dashDB®.
- ***Modernize existing applications***
  Use IBM Cloud Private to help enterprise customers simplify the creation of microservices and other containerized apps, modernizing existing apps through capabilities designed to help reduce costs.

01.2 IBM Software
So what's the problem?

The benefits of IBM Software are too many to mention, but it can also be expensive, and difficult to track and maintain. Cloud and complexity make controlling your IBM Software infrastructure even harder.



IBM Software Asset Management

IBM's Licence Metric Tool (ILMT) is intended to help organisations manage their IBM Software licensing requirements, and help them maintain an audit ready posture. In fact, ILMT ***must*** be installed, configured and maintained in order for organisations running any IBM software in a virtualised environment to achieve, and maintain, compliance with their IBM Passport Advantage license agreement.

However, whilst most users manage to install ILMT, configuring it correctly can be difficult and much can go wrong. Common issues include:

- ILMT data collection failures
- ILMT application not working
- Broken connections to Hypervisor
- Software classification errors

If you get it wrong, and your organisation is audited, you may be looking at a hefty fine or unplanned software purchase.

Red Hat Ansible Automation Platform can help.

Red Hat Ansible Automation Platform

What is it?

Red Hat® Ansible® Automation Platform is a foundation for building and operating automation across an organisation. The platform includes all the tools needed to implement enterprise-wide automation.

An expansive foundation for building and operating automation at scale.

Red Hat Ansible Automation Platform enables enterprise-wide automation, no matter where you are in your automation journey. Simple, and agentless, it can improve current processes, migrate apps for better optimisation, and provide a single language for DevOps practices across an organisation. A visual dashboard with role-based access control helps to centralise and control your IT infrastructure.

Ansible Automation Platform allows users to take three simple actions with their enterprise automation journey:

Create

Get started fast by combining the power of Ansible's open-source community with prebuilt Content Collections of the most-used Ansible roles and modules.

Scale

Easily transfer your automation into multiple domains and across different use cases.

Engage

Take your automation even further with analytics, policy and governance, and content management.

02

02. Ansible Automation Platform
Automates anything, anywhere

498%

five-year return on investment

68%

more productive IT infrastructure management teams

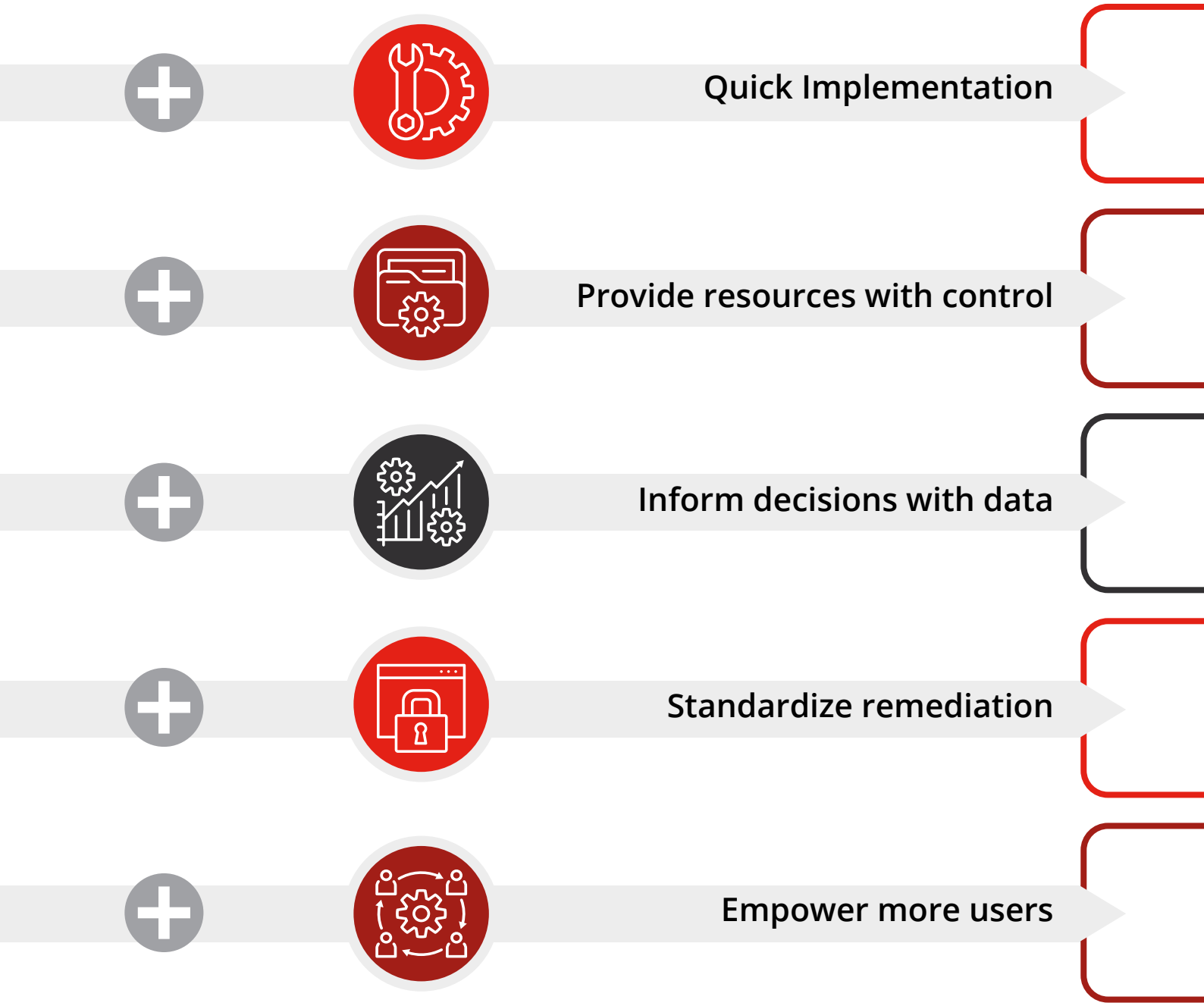
135%

more applications developed every year

53%

reduction in unplanned downtime

02.1 Ansible Automation Platform
Features & Benefits



01 Access collections of supported, precomposed content - including those provided by certified partners - and distribute them throughout your organization.

02 Give developers and business users access to automation resources where they live - across physical, virtual, cloud, and container environments. Provide enterprise and line-of-business users with the automation governance they need to meet compliance and procurement requirements.

03 Automation Analytics - a SaaS capability that comes with your subscription - lets operations team members analyze and aggregate data, and generate reports on the status of your automation deployments. A ROI calculator helps advance your automation program by enabling teams to show the time and resources they've saved using automation.

04 Security teams face a variety of multi-pronged threads as they work to protect infrastructure resources across multiple vendors. Ansible provides a more efficient, streamlined base to automate security practices and bring together the different tools used in security activities.

05 Extend the benefits of Ansible Automation Platform to network administrators and teams. Modules give users a common language - even across different vendors. Those network modules can configure your network stack, test and validate your existing network state, and discover and correct network configuration drift.

03. IBM Software Management
With ILMT & Ansible Automation

IBM mandates that all organisations using sub-capacity licensing in a virtualised environment must actively use its License Metric Tool (ILMT) to ensure software compliance. Whilst ILMT is a free tool, it must be updated and maintained on an ongoing basis.

A question we get asked regularly is how to go about reconciling ILMT and its requirements with existing processes for internal software asset management.

ILMT is agent-based; so, should ILMT agents be installed on every server in your infrastructure? Or, just on the servers you think are running IBM Software?

All too often it becomes a conundrum of expenditure vs risk.

With Ansible Automation Platform, IBM software users can check exactly where IBM software is installed, never miss a server again, and ultimately solve the expenditure vs risk conundrum.

Agents or Agentless?

IBM audits its software customers regularly. The most common issue auditors come across is software usage exceeding entitlement, or put simply, using more licenses than what has actually been purchased. This generally leads to unplanned software expenditure, a large fine, or both.

In contrast to ILMT, Ansible Automation Platform is an agentless solution, i.e., it only needs to be installed once, and communicates with all other machines via the software already installed on them - including natively installed components and operating systems. Hence with Ansible Automation Platform, IBM software users could check exactly where IBM software is installed, never miss a server again, and ultimately solve the expenditure vs risk conundrum.

03

Plus, if you're already running ILMT or Ansible Automation Platform on Red Hat Enterprise Linux (RHEL), why not put them on the same server (physical or virtual) and reduce your management server footprint?

03.1 ILMT & Ansible Automation
Concurrent use benefits

> Automate once, use many times...

Easier config. management and software deployment

Ansible playbooks can be used to install IBM Software pre-requisites. Playbooks are highly effective in changing IT infrastructure, and can be applied to most software products, irrespective of vendor.

Software consolidation and cost reduction

IBM Software is best-of-breed and often expensive. If you get it wrong and face a software compliance charge it's usually unbudgeted and more than a little painful. Maximise efficiency of your IBM Software entitlements by using ILMT to ensure license compliance, coupled with Ansible Automation Platform to identify redundant usage.

More efficient use of your internal IT resources

Ansible allows you to drive complexity from your IT environment by automating repetitive tasks and extending the expertise of your IT resources. For example, with Ansible playbooks you can introduce delegated authority of complex tasks, or reduce mean-time-to-fix by automating problem determination.

03.2 Moving to Cloud
With ILMT & Ansible Automation

If you haven't done so already, the chances are that moving some or all your applications to the cloud – whether public, hybrid, or private - is on your agenda in the not too distant future. In fact, the public cloud infrastructure alone is expected to grow by 35% in 2021, with 50% of enterprises now spending more than $1.2 million on cloud services annually.

Moving your on-premise IBM Software to cloud temporarily increases usage, as typically a dual running period is required for configuration and data transfers. Under Passport Advantage IBM provides a 30-day grace period for cloud migration, which can be managed quickly and effectively using ILMT and Ansible to:

- Ensure pre-requisite software and libraries are installed
- Automate the install of IBM Software

Just remember to note the reason for the increase in your ILMT reports, and be sure not to exceed the 30-day grace period!

04 ILMT & Ansible Automation
What Next?

STEP 1

A good place to start is with an Elyzium IBM License Metric Tool Healthcheck.

It will ensure that:

- pre-requisite software and libraries are installed
- data collection scans are scheduled correctly and working correctly.
- the ILMT application is up-to-date, configured appropriately and functioning as it should.
- any broken VM Managers and/or links are identified and rectified.
- all IBM software is accurately classified in terms of version and licensing model, with any unusual scenarios catered for.
- software usage matches license entitlement - we often find that customers are over-licenced!

STEP 2

Discuss how your IT infrastructure is likely to change going forwards, and how Ansible can help you to manage this quickly, easily and cost-effectively.

Common areas include:

- **Current Infrastructure Lifecycle**
  The rate of infrastructure change has never been higher. This is due to the demands of the business and the continued requirement for security. Common Vulnerabilities and Exposures (CVE) alerts are constantly driving update cycles within your IT infrastructure. These CVE exposures drive vendors to accelerate production of new versions of operating systems, and enforce end of life for older versions, hence driving organisations to either upgrade or move to cloud.
- **Cloud Infrastructure**
  Most businesses have started their move to a hybrid cloud infrastructure with one or multiple cloud providers. Managing this new hybrid world presents fresh challenges, and your existing IT resources must adapt to meet them. A single configuration management tool for your distributed infrastructure is a must.
- **Future Needs**
  IT is often viewed as a business differentiator, and we have seen many organisations disrupt their industries using agile IT solutions. Containerisation enables agility, allowing fast development and scalable serverless infrastructure to move from project to production in the least amount of time.

Configuration management through Ansible Automation will allow you to meet current and future needs, be they on-premise or cloud-based.

1.5 STEP 3

Work with Elyzium to define a plan which will maximise your IBM Software assets using Ansible.

Irrespective of whether your IT infrastructure is on-premise or in the cloud, your IBM Software assets must be managed. ILMT tracks installations, and Ansible Automation delivers management capabilities for your IBM Software.

You define the priorities for your IBM software usage, based on business requirements and the changing nature of your IT infrastructure. Cost savings are always a priority, and can be produced by automating configuration management and software deployment with Ansible Automation.

Subsequently, Elyzium will assist in defining a mutually agreed plan to maximise your IBM Software using the Ansible Automation Platform. This will furnish you with the agility necessary to meet business priorities.

05 ILMT & Ansible Automation
Why work with Elyzium?

Leaders in automation.

Elyzium is a fully accredited Red Hat and IBM Gold Business Partner, with over 20 years experience of delivering enterprise automation solutions for some of the UK's largest organisations. As subject matter experts in software licensing and subscriptions, Elyzium has built strong working relationships with Red Hat and IBM and is well placed to help you on your Red Hat Ansible journey.

We build a "trusted advisor" relationship with all our clients by providing them with guidance on best practices to ensure maximum return on their investment at all times.

05

"From diagnosis to migration, and implementation to training and support, Elyzium have demonstrated their unrivalled expertise and knowledge in automation, and supported Experian every step of the way in achieving our business goals."

- ***Experian***

"Elyzium's expertise and advice has been invaluable."

- ***YBS Group***

"We have worked with Elyzium for many years, and they consistently prove their skills and expertise in automation."

- ***Nisa***

To discuss how we can assist your organisation specifically, please do not hesitate to get in touch.

CONTACT US

For further information, or to discuss your specific needs, please get in touch.

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