Automation that accelerates transformation

The digital enterprise requires smarter infrastructure automation.
Speed is of the essence

Success in the digital era is all about speed and agility. Competitive differentiation, customer loyalty, and superior business outcomes depend on accelerating the cadence of everything from application release cycles to customer service to internal support. And those processes depend on faster, more cost-efficient allocation of IT infrastructure.

What’s the key to accelerating provisioning and deployment? In a word, automation. By taking an integrated, practical approach to automating IT processes and adding intelligence to automation, enterprises can reduce complexity, drive operational improvements, and keep the digital transformation initiative moving ahead at full speed.

Infrastructure automation is also the key to reducing the total cost of delivering high-quality services and improving the user experience. It helps eliminate errors and outages, and it enables IT to optimize labor allocation and resource capacity and consumption across the entire IT supply chain.

Most IT departments have been implementing automation gradually and incrementally for years, yet very few have achieved a level of maturity that allows them to take advantage of advanced automation capabilities such as service orchestration, cognitive autonoms, and artificial intelligence (AI). As a result they are missing an opportunity to achieve the full business value of automation.

What’s needed is a faster, smarter, more complete way to approach infrastructure automation—and a partner who can provide expert assistance at every step of the way.

Capgemini’s Cloud Infrastructure Services Automation Drive offerings provide an end-to-end, seamless way to harness the full value of infrastructure automation, so you can increase efficiency, cut costs, improve quality, explore new opportunities, and accelerate digital transformation in a controlled way. Simply put, automation is an experience. We combine machine power with business vision so you can experience new ways of working, driving innovation, and increasing business value.

What’s driving the need for more intelligent automation?

- 78% said delays within IT support negatively impact productivity
- 60% describe their interactions with IT support as time consuming
- 48% said these interactions are frustrating

  — CIO Insight Survey, April 2015
transformational capabilities. But automation must be more than a series of opportunistic, ad-hoc, discrete projects. A smarter holistic approach is required—one that focuses on systematic automation of infrastructure & operations (I&O); one that builds intelligence into automation to take full advantage of new and emerging technologies; one that views automation as a journey, not a destination.

Capgemini’s Cloud Infrastructure Services Automation Drive assists you at every step of your automation journey, regardless of your initial maturity level—from run book automation, to process automation, to advanced capabilities such as autonomics, cognitive autonomics, and AI. We automate your IT landscapes through innovative solutions and services, leading you to the business benefits of the digital enterprise.

Figure 1: Bimodal IT requires a difficult balance between traditional IT and digital enablement.

Figure 2: Whatever your current level of maturity with automation and autonomics, Capgemini can help you achieve your current business goals and harness new advancements as they emerge.
Specifically, Capgemini can provide the following Cloud Infrastructure Services Automation Drive capabilities and resources for infrastructure automation:

- **Services to optimize the automation of current IT processes:** Capgemini can assist you with automating a wide range of traditional IT tasks and processes, such as run-book automation, automated disaster recovery process and change execution process, server lifecycle management, integrated provisioning, compliance tasks, maintenance tasks, and so on.

- **Services to plan and execute your digitalization journey:** Capgemini offers strategic advisory and implementation services that transform and enable the digital enterprise—from planning to a broad range of services that provide the tools, technologies, and expertise to add intelligence to infrastructure automation. Capgemini’s services enable your systems to progressively self-adapt, self-optimize, self-heal, self-manage, and self-observe, speeding up the cadence of traditional IT and empowering you to accelerate the move to bimodal IT and support digital business models.

- **Our Automation Reference Architecture,** which underpins all services, is an integrated, modular, multi-faceted platform populated with best-of-breed integrated technology from Capgemini and world-class partners. This reference model comes with a pre-built analytics engine, intelligent sensors, machine-learning capabilities, memory packs, diagnostic kits, neural reflexes and more. It adds exciting new capabilities to infrastructure automation today and will continue to evolve based on real-world best practices, client input/feedback, and shifts in technology.

### Automation inside

While other service providers attempt to “bolt on” automation capabilities via new services and solutions, Capgemini builds automation into its infrastructure service offerings, making it easy to leverage our automation expertise, IP, and resources. Simply put, automation is **already an integral part** of many of our existing offers in multiple categories, including Cloud Services, Data Services, Workplace Services, Cybersecurity Services, and Service Integration. For example:

- Capgemini can assist you with automation as part of a cloud enablement strategy, allowing you to automate workload allocation among private and public clouds to accelerate your success as a hybrid IT services provider.

- Capgemini can help you digitize and automate the service desk, enabling employees and contractors to access a single user experience in the way they access support, empowering IT to expedite the resolution of issues and requests through automation services such as virtual digital assistants and neuro linguistic programming.

- Capgemini can not only bring together separately contracted and supplied IT service providers to ensure they consistently work together, but can also orchestrate complex interactions among multi-vendor services. We can integrate all aspects of the environment—operations, projects, performance, and planning—so that your enterprise can automate service delivery, manage the complexities of multi-sourcing, convert data into intelligence that drives business process improvement, and more.

### Applied Innovation Exchange

Capgemini’s Applied Innovation Exchange (AIE) makes it even easier to explore the possibilities of automation for your specific circumstances and desired business outcomes. The AIE is a global platform designed to enable enterprise clients to discover, experiment, contextualize and apply the most relevant innovations in automation and other transformative technologies.

One of the core components of the AIE is the cohesive network of Exchange spaces designed to provide an immersive environment for exploration. Each Exchange provides a structured and secure environment to enable you to understand and apply emerging technologies. Also, the Exchanges offer deep sector expertise to enable you to apply these innovations to your specific business context. These Exchanges provide exposure and access to the portfolio companies of selected venture capital and private equity partners, while enabling the immersion in and application of the vast sources of industry-specific innovation Capgemini has access to.
Superior Business Outcomes from Automation

Capgemini’s Cloud Infrastructure Services Automation Drive resources, combined with our intense focus on business results and our uniquely collaborative engagement style, enables you to accomplish far more with automation than you may have imagined. You can:

- **Accelerate digital transformation** by rapidly converting manual IT processes into automated, cloud-ready, digital services that can speed up all facets of business operations.
- **Reduce TCO** dramatically by optimizing automation across IT—including not just infrastructure provisioning but also DevOps, IT operations management, compliance & governance, service desk, support channels, and more.
- **Increase business agility** by getting the right IT resources to the right teams at the right time and at the right price—without risking compliance or security violations.
- **Optimize the workforce.** Cloud Infrastructure Services Automation Drive helps reduce labor costs but more importantly allows for the re-skilling of workers for higher-value tasks—so that the enterprise is no longer overly dependent on a few individuals with highly specialized skills.
- **Improve the user experience** by accelerating and integrating the provisioning of resources and making it easier and faster to access support across multiple channels.
• **Transition to hybrid IT and orchestration** to increase efficiency, implement new business models, streamline business processes, and encourage innovation.

• **Hit the accelerator on core business initiatives** such as the transition to DevOps, increased use of analytics, creation of a digital workplace, and exploration of new technologies.

• **Reduce shadow IT.** Our automation resources enable IT to deliver the innovative services clients need and the cost savings the business demands while maintaining control—and this combination can help to reduce the impetus for shadow IT across the enterprise.

• **Exploit the full potential of advanced autonomies** at your own pace, introducing new technologies and capabilities without risking disruption to existing practices and processes.

---

**The Capgemini advantage**

Whatever is your current level of maturity with automation and autonomies, Capgemini can help you achieve your current business goals and harness new advancements as they emerge—because Capgemini is the one partner that combines ALL of the following capabilities and advantages:

• **End-to-end capabilities:** We can take you across the entire automation journey regardless of your initial maturity level.

• **Real expertise, real platform, proven in real-world deployments.** Capgemini has expertise in every facet of automation and can provide a plug-and-play platform that has been used internally and in client deployments around the world.

---

**Deep expertise and experience in Infrastructure Automation**

• 170+ clients now using Capgemini automation solutions

• Capgemini automation solutions currently managing:
  - 45,000+ servers
  - 40 PB of storage
  - 23 cloud platforms
  - 1M end user devices
  - 14,000+ situation monitoring sensors and probes across multiple technologies
  - 100,000 lines of code developed for Smart Correlation using Intelligent Analytics Sensor
  - 2500+ Memory packs for 200 + IT processes
  - 2500+ Identified Patterns building Neural Reflexes using heterogeneous technologies
  - 600+ DevOps code repository for varied functions like development, build, test and product workflows
  - 70% reduction in Event : Incident ratio via use of Intelligent Sensors with enrichment mechanism
  - 1800+ incidents/month eliminated with Intelligent Sensors with analytics
  - 35% reduction in incidents on a scale of 39K incidents using machine learning and neural reflexes
  - 100K contacts passed to service desk using Virtual Agent and Odigo Platform—growing at 100% YoY
• **Vendor-agnostic, best-of-breed approach:** Capgemini’s approach is open and incorporates the best solutions and technologies available from our world-class partner ecosystem, that includes BMC, Cisco, EMC, HPE, IBM, Microsoft, Prosodie, Redwood, VMware, and many others.

• **Integrated infrastructure services** that incorporate, complement, and add value to the automation capabilities. For example, automation/autonomics services can be delivered in conjunction with Capgemini’s Cloud Services, Service Integration, Cybersecurity, Data Services, ERP, and Digital Workplace offerings.

• **Unprecedented flexibility:** You can select individual services for immediate needs without the concern that they will create new silos or incompatibilities later; you can choose combinations of services without having to deal with complexities; and you can choose on-premises deployment or cloud-based models for many service offerings, giving you a new range of cost optimization options. We can also work with your existing technology choices where required.

• **The “what” AND the “how.”** Capgemini can provide expert advice and assistance in what needs to be automated to achieve your business goals and how to actually build and deploy the optimal solution, beyond the technology to include the people and process changes, and we can implement and manage it for you. We are a single source for comprehensive, end-to-end solutions that incorporate multiple solutions, services, and suppliers.

• **Global reach, local resources.** Capgemini can deliver services virtually anywhere in the world and scale up as required to meet your growing needs.

• **Support for bimodal IT.** Capgemini’s innovation model helps you embrace a bimodal IT approach that allows for both the creation of innovative agile systems and the management of the traditional systems.

• **Future-ready technology.** Capgemini can help you achieve your immediate business goals and implement new technologies and solutions as they emerge, at your own pace.

---

**What’s what?**

Terms can be confusing because they’re used inconsistently across the industry. Here’s what we mean when we say…

• **Automation:** Pre-scripted processes to perform tasks

• **Service orchestration:** Automating the automation of provisioning business and IT services

• **Autonomics:** Automation with added intelligence for self-optimizing infrastructure

• **Cognitive autonomics:** Self-learning, self-adapting infrastructure capabilities

• **Artificial intelligence:** Context-based reasoning, planning, learning, and adaptation

---

**Learn more**

For further information please contact:
infra.global@capgemini.com