

Trying to keep server configurations consistent across your enterprise is nearly impossible using manual techniques. Many companies are adopting modern technologies to automate the process but struggling to deal with the complexity of their environments. How does a company transform the way they manage server operations while reducing risk and cost? What if an automated approach could save time and improve service availability? Better still, what if it could change how your infrastructure team communicates to make them more efficient and effective? Our experience in automated operations management can help your company achieve these goals.

Our Focus

A common failure in operations teams is that documentation does not match current state of the enterprise, or the processes used to manage it. "Infrastructure as Code" addresses that gap by capturing the desired state of each server in a format that can be enforced to bring the environment into compliance with those standards. This largely eliminates the need for documentation and manual operations by describing exactly how systems should be configured and using tools to automatically apply the appropriate changes. This work is all performed in a common repository of desired state definitions, which becomes a tool for communication and collaboration for the operations team.

Our Approach

We apply software development techniques to infrastructure, capturing the desired state of your infrastructure in a text format that is akin to software source code. Once your policies are captured in a "code" format, the same processes used to drive iterative software developments enable small, incremental improvements across your IT infrastructure. This approach simultaneously enables greater collaboration and reduces risk by supporting development best practices:

- ▶ Version control
- ▶ Agile development
- ▶ Modular design
- ▶ Automated testing



What You Can Expect

We define infrastructure elements as text file comments and look for common attributes to simplify testing and "component" reusability. Consistent formatting lets you test and verify that each configuration will meet your specifications – letting you assess your infrastructure quality before you deploy – reducing negative impacts on production environments. Armed with data, you can take the appropriate action to align your servers and other infrastructure components with the goals and attributes you seek. We will set you up for success, where you can constantly detect and fix problems before they become pervasive. We include:

- ▶ Current vs. Desired State Analysis
- ▶ Syntax and Style Checking
- ▶ Unit Testing
- ▶ Integration Testing
- ▶ End-to-End Testing

When applied correctly, the above techniques produce greater consistency, reduced risk, and shorter lead times for infrastructure deployment and upgrades. They can be applied to software delivery processes or to static IT infrastructure. The greatest benefits are realized when the same policies are reused across multiple environments. At its conclusion, our Infrastructure as Code service results in a central policy repository for the entire team to leverage as a reusable process and collaboration resource.

About Paragon Solutions Group

Paragon Solutions Group helps IT teams more effectively interact with the rest of the business to enable growth and agility. Our progressive approach to IT maturity and our focus on measurable outcomes provides IT organizations with the perspective, methodology and tools to build a strong foundation that serves and is valued by all of IT's stakeholders.