

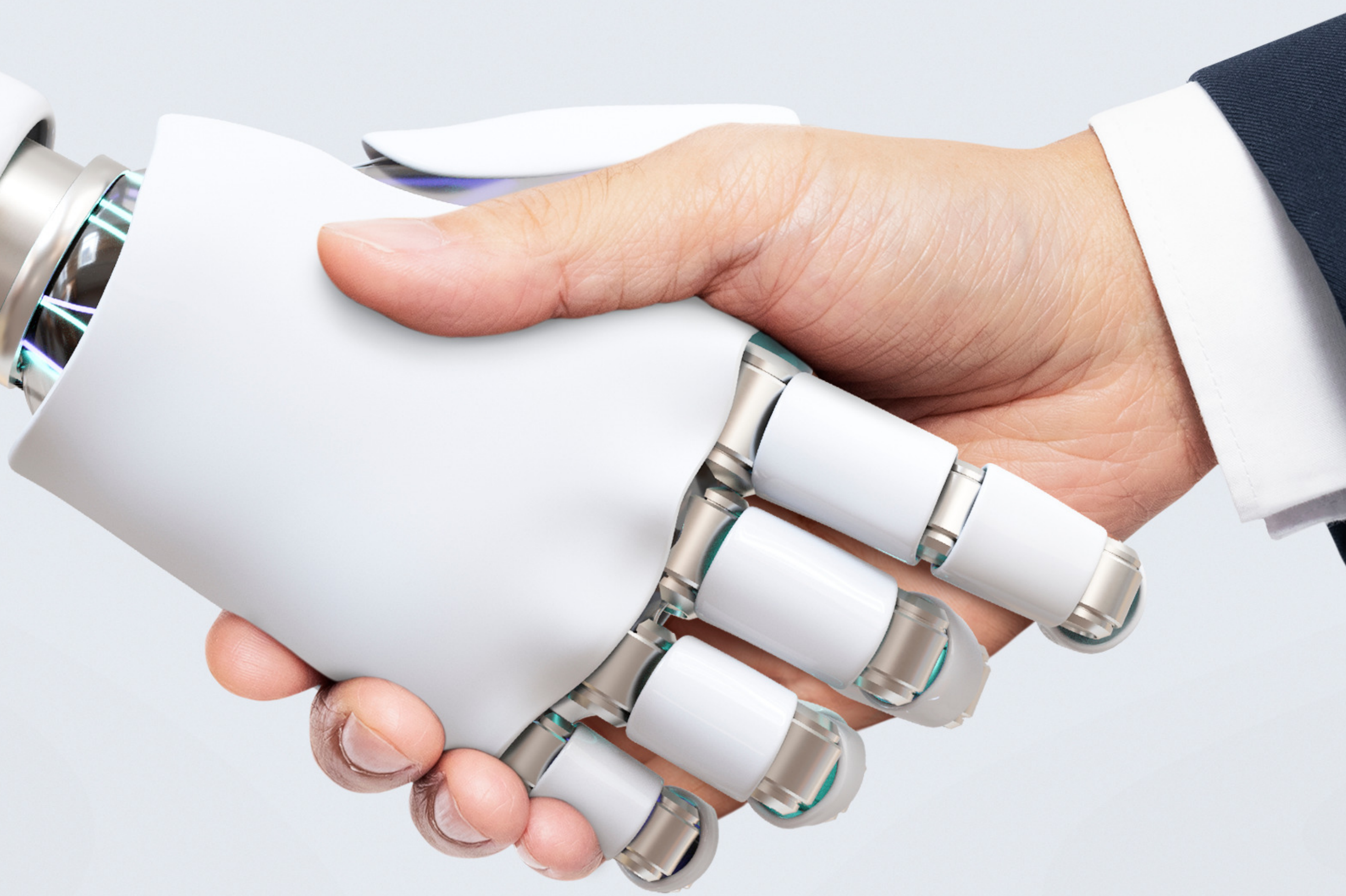
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# Ensono's Automation Innovation

A straight-forward and agnostic approach



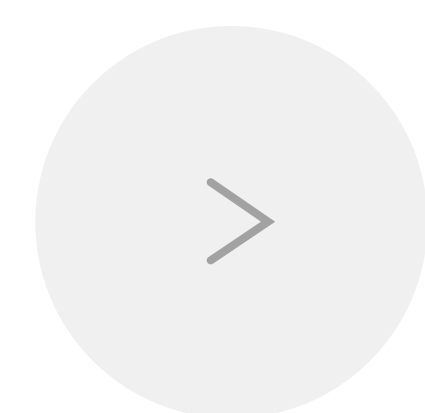
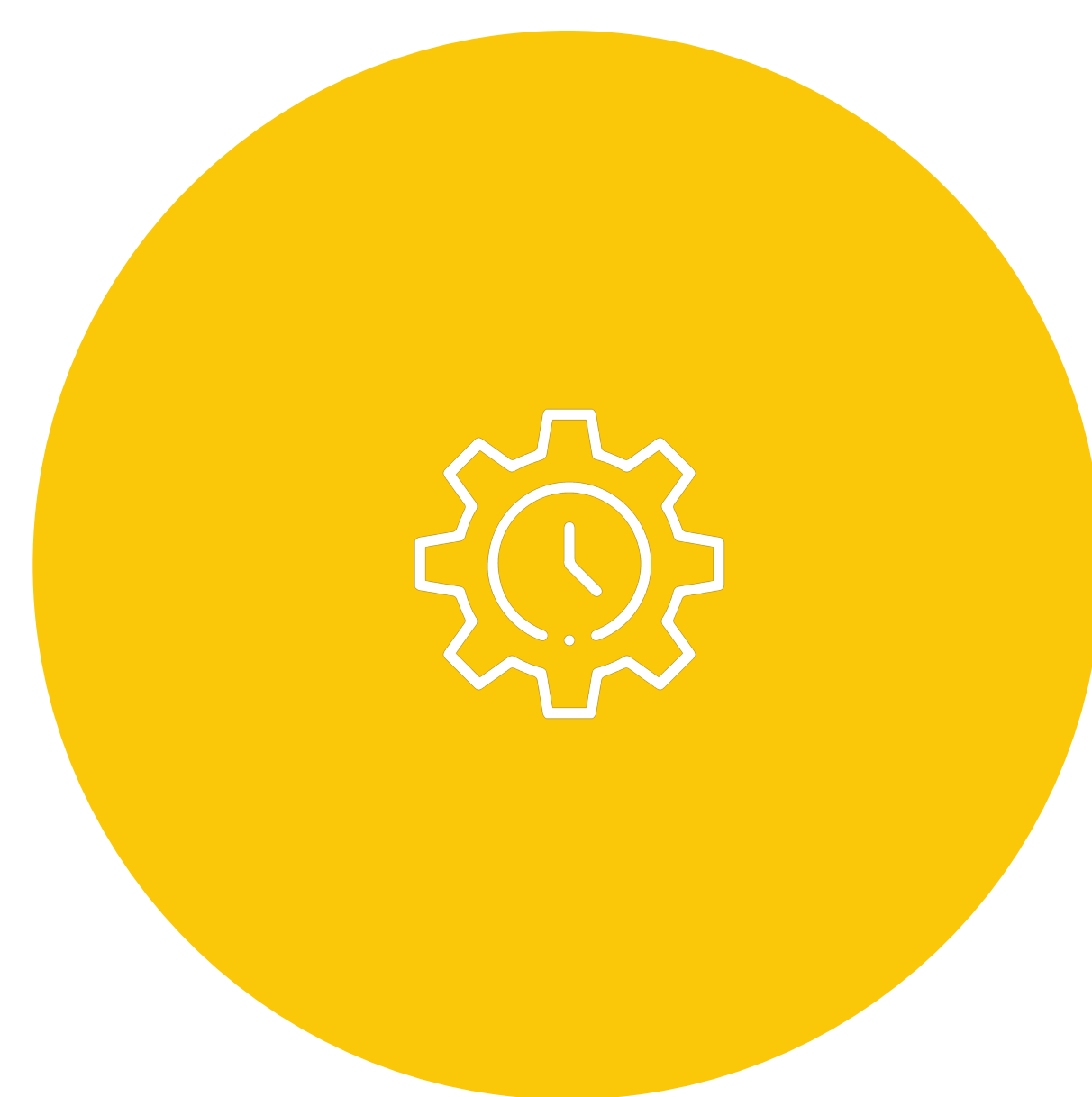
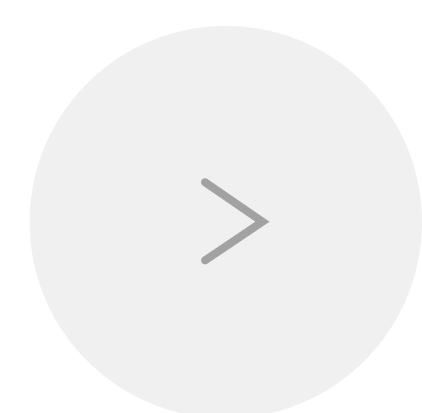
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## How Ensono uses automation to create differentiated value

We recognize that there is no one-size-fits-all solution for efficient and effective workflow and infrastructure management. Our continuous goal is to automate every step of operating our clients' environments, organizing complexity, and augmenting manual intervention where it makes sense.

**With our automation approach, we can spend more time on what really matters. The benefits to our clients and our own associates manifest in accuracy, efficiency, and consistency.**



### Accuracy

- Scripting created more accurate workflows
- Robotics focus on higher-level touch reducing human error on repetitive tasks
- Performance is greatly improved with more accuracy

### Efficiency

- Prevent, react, pivot and make decisions faster
- Automate the analysis and data collection methodology
- Reduce "swivel chair activity" with parallelized execution

### Consistency

- High level of repeatability in way we resolve issues
- Flawless stability in our execution process
- Advanced detection of patterns resulting in standardized templates and workflows

# Ensono uses a multi-prong approach to automation innovation, targeting

- Workflow Automation by streamlining processes and minimizing manual activity
- Event Resolution Automation by providing a proactive, automated resolution for identifying, responding, and resolving events.
- Governance Automation including configuration validation, service validation, and exception handling.



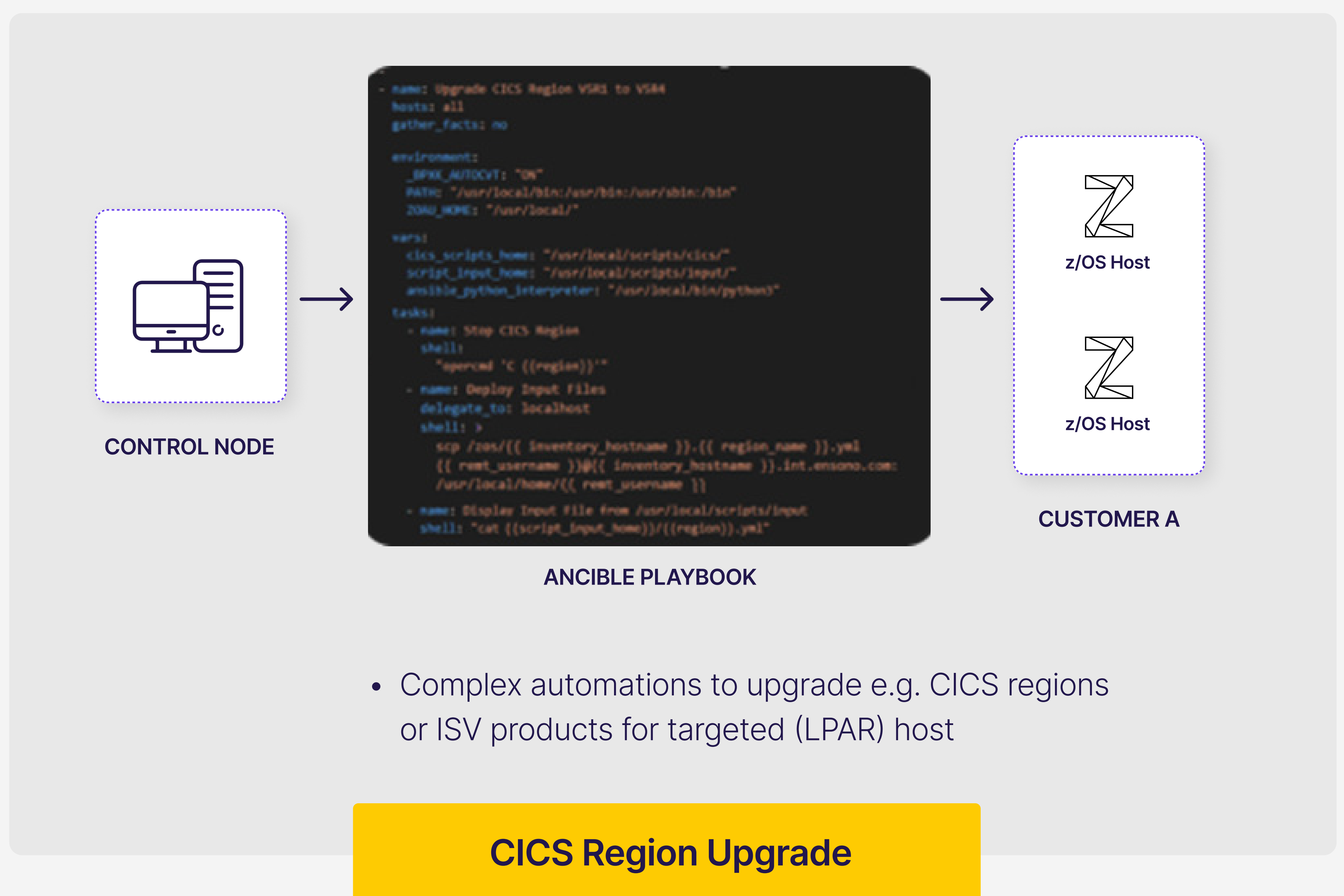
## Some examples of how Ensono can use automation in the Mainframe (IBM Z Systems) context

# 01

## Workflow Automation

Streamline Processes

Minimize manual activity  
coordination



# 02

## Event Resolution Automation

Automated Resolution  
Build, Deploy and Upgrade

### Orchestration

**Ensono Alert Remediation:**

- Ensono Developed Application within Service Now
- Configuration and Mapping Business Logic
- Setup Workflow Orchestration

Active	Automation Platform	Automation Script	Client	Domain	Event Type	Timer
<input type="checkbox"/>	Ansible-POC	700	Aflac	TOP/Ensono-Global/Aflac	FILESYSTEM	
<input type="checkbox"/>	Ansible-POC	600	Dun and Bradstreet	TOP/Ensono-Global/Dun and	FILESYSTEM	

**First Automation Scripts leveraging new framework**

# 03

## Governance Automation

Validate Config  
Service Validation  
Exception Handling

```
name: Create My VSAM
hosts: all
vars:
  common_scripts_home: "/usr/local/scripts/security/"
tasks:
  - name: Allocate VSAM Cluster
    shell: >
      {{ common_scripts_home }}createVSAM.py OEMOS.MY.VSAM
      --cluster-space-type CYL
      --cluster-space-primary 15
      --cluster-space-secondary 5
```

**Maintenance Validation and IVP**

- Maintenance downtime system validation
- Automations capable to run across multiple hosts (LPARS) simultaneously

# Ensono uses a framework of technologies that can adapt and scale

Our implementations leverage fit-for-purpose commercial tools as well as open-source technologies – for example, Python and Ansible across any platform, tools such as Z Open Automation Utilities, ZOWE and z/OS Management Facility for Mainframe-specific applications or Terraform for cloud applications. The proprietary IP we create and execute is designed to be as agnostic and portable as possible, because the ability to adapt to changing and new technologies and challenges is critical to a successful managed service provider.

## We monitor for and resolve events proactively with a consistent methodology

- Automation framework is 100% closed loop process and 90% Proactive
- Each step should eliminate noise with minimal human intervention where possible
- Some activities will require human oversight and validation before execution

