Background and Challenge

A Fortune 500 Hospitality Company with aggressive global expansion plans needed to automate repetitive tasks for thousands of servers in the data center.

The Client was growing internationally and rapidly evolving from U.S.-centered IT to true multinational IT. Data center demand was soaring from business growth while staffing remained flat due to strategically important cost containment. The only option was to find ways to do more with the existing team. Automation of repetitive work was the obvious answer. The project was slated to begin in a single data center before rolling out to data centers around the globe.

Challenges included:

- *Automating repetitive processes, troubleshooting and remediation activities*
- *Applying automation consistently around the globe for scaling, security and reliability*
- *Creating a sustainable and manageable solution, understanding that uncontrolled automation can spread rapidly and become confusing, duplicative and dangerous*
- *Becoming self-sufficient in automation upon completion of the consulting engagement*

The Client turned to Evergreen for its expertise not only in the HP Operations Orchestration (OO) technology, but also its best practices and design discipline.

Evergreen's Approach

Given the Client's needs Evergreen designed a two-part implementation featuring a "workflow factory" process for the consideration, selection, design and ongoing maintenance of workflows, followed by an extended mentoring and development phase – where we led the Client to become proficient in the development of workflows, actively using the "workflow factory" process.

This process enabled the Client to identify the highest value workflows to develop within their resource limits and how to apply a consistent SDLC (systems development life cycle) process to the design, development and deployment of workflows. Once a given workflow became operational, the Client was able to apply a library function built into the "workflow factory" to catalog, maintain and reuse production workflows and objects.

The team designed a workflow candidate filter much like a project filter in a PPM (project portfolio management) solution. Candidate workflows were assessed from a range of weighted perspectives, including strategic value, business/ROI potential, complexity, development effort and reusability/extensibility. The rated areas combined in a scoring system to yield a calculated overall value for each candidate workflow.

Evergreen assisted with the design of a lightweight development architecture approach for the SDLC, purpose-built for the unique process and technical nature of OO development activities – from design to development to test to deployment to maintenance. The team developed a library-like repository leveraging the native OO workflow repository so the Client could maintain, reuse and account for workflows and objects – helping staff know what the Company owns and how the Company is using it.

Evergreen then architected, designed and deployed a complete OO v9 implementation, including development and test environments.

Finally, Evergreen's solutions architects worked hands on with the Client's staff to teach best practices in developing objects, defining workflow architecture and effective reuse. Evergreen provided guidance on getting the highest value from the technology as well as key lessons learned from years of experience in the field.

Outcome and Benefits

Creation of the automation factory framework with a web-based front end of searchable content and flows, enabled consistent selection, design, development, support and reuse of workflows. The Client was able to develop a strong and sustained process to create and manage workflows as a core strategic differentiator in supporting its global expansion. Work included the development of complex automations such as a global network operation system procedure automating nearly 100 manual steps with multiple logins to multiple servers, with various credentials.

Most importantly, the Client established self-sufficiency in developing and maintaining workflows – considered a core strategic capability in paving the way for global expansion with their own dedicated automation team.

- *Reduced operational costs by automating manual, repetitive and error-prone tasks, freeing critical IT staff bandwidth*

- *Improved service quality by reducing escalations and mean time to repair (MTTR) through the automation of event and incident triage, diagnosis and resolution*

- *Coordinated change and tasks across siloed systems and teams, reducing inefficiency, complexity and risk associated with manual hand-offs*

- *Operationalized a consistent global SDLC architecture for lifecycle management of workflows*