## Real-World Automation: Complete, Automated Provisioning of Virtualized Environments Using ServiceNow Orchestration

## **Background and Challenge**

GlobalBank is a leading global lender and a key financial policy leader, worldwide.

IT Operations are siloed, manual and supported by old technologies. GlobalBank is in dire need of an ITSM transformation, but IT needed to deliver compelling proof of the value to get executive support for the program. A pressing problem looked like a perfect opportunity.

GlobalBank relies heavily on virtualized servers to meet their mission, but provisioning and managing them was entirely manual – with the work passing through three to four different IT organizations. Provisioning a single environment took over 14 days, GlobalBank had no visibility into where they were in the process at any given time and inconsistent quality was causing significant business disruption. Beyond that, after VMs were created there was no way to track them, so GlobalBank began to experience ever-growing "VM Sprawl" – abandoned and underused instances draining IT resources and money.

With GlobalBank provisioning over 500 virtual servers per year, this problem was creating a significant strategic and economic drag on the bank. GlobalBank saw that automating a truly complete, end-to-end solution for virtual provisioning would be very valuable.

ServiceNow was selected as the platform, and Evergreen was engaged for our depth of experience and pre-built solutions in Service Catalogs and Automation, enabling us to move quickly.

## **Evergreen's Approach**

As we examined the problem together, four key steps emerged:

- Understand the Business Need and Workflow. We quickly baselined, simplified and improved the existing processes and added steps to manage de-provisioning.
- Identify and Build Automations. We reviewed each step of the improved process and built scripts to automate them.
- Use what ServiceNow Has Today. Some basic VM provisioning automation comes out of the box. We extended and deepened it to create a robust, end-to-end solution supporting a wider variety of options and integrations.
- **Identify and Build Orchestration**. Orchestration was used to tie the individual automation scripts together creating the end-to-end solution.

Development was done in Evergreen's Agile consulting methodology with short release cycles and frequent stage reviews.

## **Outcome and Benefits**

The completed solution lowers the lead time to provision a complete, virtualized environment from 14

days to half an hour – a 99% reduction, with complete visibility into the process at any time. Further, it is estimated that the actual work hours to provision a virtual server have fallen from 8 hours per server to just 15 minutes – a 97% reduction.

- GlobalBank Has Dramatically Accelerated their Dev/Ops Cadence. This is especially important
  to GlobalBank's developers. As the cost of provisioning drops near zero, so does the cost of failure
  (experimenting). As the cost of failure approaches zero, the pace of innovation explodes.
- Quality Has Dramatically Improved. Aided by a consistent, single process and automation.
- Strategic Quality of Service Has Improved. Measured in speed, accuracy, consistency and reduction of risk/failure.
- Efficiency Savings Are Significant. As the automation eliminates 3,900 hours of highly skilled resources per year, worth more than \$300,000 annually.
- VM Sprawl Is Being Demystified. As automated processes for detecting and de-provisioning are finding and reducing "VM Sprawl" freeing up IT resources, capacity and costs.

According to the Client, "automating the creation of a virtualized server end to end is a very complex activity. It must be well understood and thoughtfully built – combining automation scripting and orchestration and externalizing it via Service Catalog for easy, self-service consumption. Evergreen has significantly broadened and deepened this key functionality in ServiceNow – literally changing how we do business."

Evergreen creates the most beautiful, simple, customer-centric Service Catalogs and service automations on ServiceNow.