



## DATA CENTER ORCHESTRATION

### Automating Run Book Tasks

#### INDUSTRY

Managed Hosting Services

#### CHALLENGES

- Manual processes forced technical staff to waste hundreds of hours on menial set-up and configuration tasks
- Siloed management tools created major inefficiencies in end-to-end process workflows
- Cumbersome service delivery processes identified as a barrier to future growth

#### CSS SOLUTION

- Developed and built tools orchestration system to automate broad set of system administration tasks
- Orchestration system is compatible with ITIL methodology
- Integrated the orchestration system with existing CRM, billing, and ticketing systems to provide seamless end-to-end information flow

#### RESULTS

- Enables complete automation of management tasks from bare metal servers to full application provisioning
- Reduced staff bandwidth as a bottleneck to customer supporting activities, providing pathway to future growth
- Freed up hundreds of hours per month of technical staff's time spent on non-productive tasks
- Enabled client to achieve >98% SLA compliance with its customers and improve upsell by 41%

The client is a leading provider of distance-learning applications and sells its offerings through a managed hosting model. Its service delivery infrastructure supports both customer-facing and non customer-facing functions including service provisioning, client/account management, service desk, incident management, event management, and change management functions.

Many of these tasks were performed manually, with no run book automation solution to facilitate them. Individual processes were managed using siloed tools with no centralized orchestration. Hundreds of hours were spent on mundane infrastructure management activities such as server provisioning, software installation, and network configuration, hindering the technical team's ability to meet customers' service delivery requirements. As technical service delivery is a foundation of its business model, the client saw this bottleneck as a roadblock to successfully growing its business.

#### BUILDING AND IMPLEMENTING AN INTEGRATED TOOLS ORCHESTRATION SYSTEM

CSS was already providing remote infrastructure management (RIM) services on behalf of the client and helped the client identify the need to implement a run book automation system. Taking advantage of CSS' in-house development skills and intimate knowledge of its infrastructure and processes, the client asked CSS to design and build a tools orchestration system to streamline its service delivery tasks.

CSS began with an exercise to build a full service lifecycle map of all operational flows, system impacts, and service surround components. The map was used to determine the structure and role of the various components of the orchestration system. A snapshot of the mapping created to support the managed hosting service is provided in the Fig.1

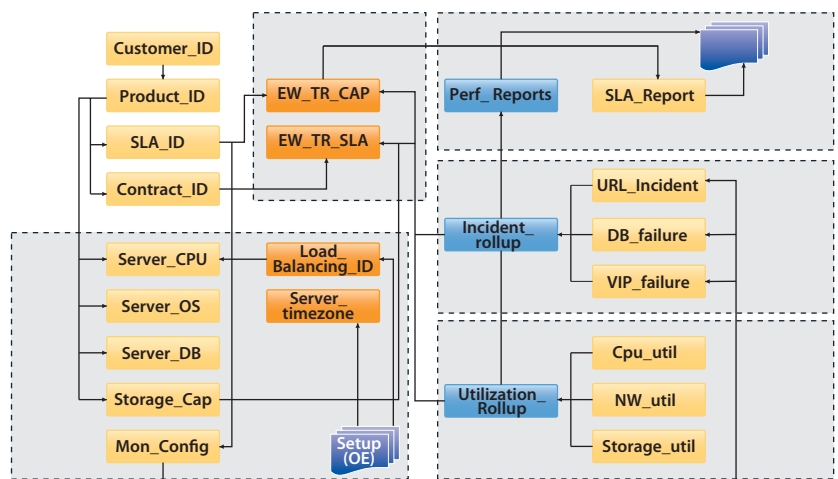


Fig.1 Managed Hosting Service Map

To build the orchestration system itself, CSS started with an existing in-house inventory and customer management tracking tool, selected in part because it already possessed the ability to execute remote server commands. CSS added incident management, change control capabilities, and functionality to track incidents, applications, systems, tasks, and network-level changes. It integrated the system with existing CRM, order entry, and billing systems as well as a range of existing custom-built tools. The result was a comprehensive ITIL-based service management framework made up of a combination of commercial off-the-shelf monitoring and management tools as well as custom developed operations support systems (OSS).

### ITIL-BASED SYSTEM AUTOMATES SERVICE DELIVERY PROCESS FLOWS

The orchestration system is consistent with ITIL methodologies and automates hundreds of tasks required to ensure smooth operation of the client's technical infrastructure. It provides the ability to design, build, orchestrate, administer and report on workflows that support a comprehensive range of operational processes. Tasks that previously consumed hours of administrators' time and days to execute from beginning to end can be performed at the push of a button.

The orchestration system automates installation and configuration of nearly every aspect of the client's technical infrastructure including servers, databases, applications, and networking hardware. It orchestrates processes from helpdesk and incident management to event and change management. At the conclusion of an activity, it can automatically update tickets in the ticketing system, and can initiate events in the ERP system so the client can begin billing immediately once service provisioning is complete. And since CSS uses the system to perform RIM services remotely, automated tasks can be performed by the lowest cost resource in one of the lowest-cost economies.

### HELPING CLIENTS WHETHER THEY CHOOSE TO BUILD OR BUY

While this particular engagement centered on CSS' development of a custom-designed tools orchestration system, CSS has deep experience working with a broad range of leading run book automation software such as HP Server Automation software and BMC Atrium Orchestrator. Whether developing a custom tool tailored to our client's specific requirements and integrating it with their existing systems, or using a commercial off-the-shelf offering, CSS has the expertise to help clients maximize the value from their tools automation initiative.

### REMOVING SERVICE DELIVERY BOTTLENECKS, IMPROVING SERVICE DELIVERY

By automating the critical system administration tasks required to support to the client's customer base, the orchestration system eliminated staff bandwidth as a bottleneck to future growth. The client estimates that the system has saved system administrators hundreds of hours per month in routine tasks, freeing up valuable time to focus on more productive, strategic activities.

The system maps the managed hosting services the client delivers to its customers and alerts staff when an SLA violation is imminent. This has improved the client's service delivery and enabled it to achieve 98%+ SLA compliance. Further, as the capacity management system now feeds threshold information directly into the account management team the client has been able to increase upsell rates by 41%.

### EXPANDING THE FRONTIERS OF IT EFFICIENCY

Cybernet – SlashSupport (CSS) is a premier global provider of IT operations services including application support, performance engineering, QA/testing, and sales & customer support. With over 3,900 employees spread over nine global service delivery centers and 70+ referenceable customers, CSS consistently provides the highest level of IT operations service quality.

CSS' Infrastructure Management division provides outsourced technology operations management on behalf of Global 2000 enterprises and leading service providers. Using a combination of sophisticated management systems, process expertise, and skilled technical staff, we help our clients improve IT service quality, maintain regulatory compliance, reduce operational expenses, increase revenue and realize competitive advantage.

### WHY CSS

- **Flexible delivery models:** on-site, near-shore, and off-shore capabilities let us tailor offerings to fit clients' specific needs and budget profile
- **Operations Optimization:** we help customers rationalize and optimize their infrastructure by applying innovative new approaches to help them reduce costs, improve service levels, and realize competitive advantage
- **Team members:** our dedicated professionals are highly motivated by our culture of innovation and **100% referenceability**, and more than 40% of our engineers have industry certifications
- **Engagement methodology:** industry best practices including the ITIL® Service Management framework create a consistent set of service management processes
- **Processes and tools:** we employ a best-of-breed combination of open-source, custom-developed/home-grown tools and commercial off-the-shelf tools and software

### CONTACT US

To learn more or discuss how we can help you, contact [sales.css@csscorp.com](mailto:sales.css@csscorp.com) or visit [www.csscorp.com](http://www.csscorp.com)



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