



Federos Integration & Automation for Service Providers and their Clients

BUSINESS NEED

Fusion1 was selected by the service provider to support a major project with one of the service provider's international customers.

The specific requirements spanned three discreet, secure operational environments worldwide.

The primary objective was to introduce a single centralized, vendor agnostic solution which would integrate and automate the designated management systems.

PROJECT REQUIREMENTS

- Flexible, role-based user interface for network management by the service provider and customer
- Automation of the on-boarding, management & decommissioning of network services
- Enable consistent device discovery
- Integration of designated management systems, utilizing a two-phased approach across three discreet environments:
 - PHASE 1: Fusion1, SMARTS, NCM
 - PHASE 2: Bluecat, SevOne, CASD

SOLUTION

Fusion1 was chosen as the management solution due to its ability to:

- **Create unlimited network views** combining information from any of the designated systems that were appropriate to specific roles
- **Integrate** disparate system information and devices from current and future vendors
- **Create automated workflow processes** that operated across all systems
- **Scalability.** Fusion1 initially manages 10,000 devices across 100 sites projected to encompass 33,000 devices across 300 sites globally.

"Fusion1 was selected for a number of reasons including the range of interfaces, and the flexibility to customize work flow processes that meet a number of different business requirements."

– Network Architect,
Service Provider

The deployment of Fusion1 was carried out initially in line with four specific use cases:

1. ROUTER ON-BOARDING / NETWORK DEVICE PROVISIONING

- Capture and approval of a change request for a new device
- Tracking of the ordering process
- Generation of bare bones configuration, based on a service provider supplied standard configuration template
- Deployment of configuration and service activation for a new device
- Population of NCM (Configuration Management)
- Full configuration download to each new device, based on a service provider supplied configuration template
- Discovery of the new device in EMC Smarts (Fault Management)
- Notification of designated teams of the successful deployment
- Error and exception handling

2. REMOTE SITE SHUT DOWN / RE-ACTIVATION

- Process a request for shut-down of a remote site
- Identification of core router interfaces, associated with the remote location
- Review and approval process for the site shut-down request
- Execution of the approved service provider configuration template for site shut-down
- Notification of the successful site shutdown
- Exception and error handling
- Process request for re-activation of a remote site
- Identification of core router interfaces, associated with remote location
- Review and approval of site re-activation request
- Execution of service provider supplied configuration template for site activation
- Notification of successful re-activation

3. PORT ENABLEMENT / DISABLEMENT

- End-user request for network service activation (port enablement)
- Review and approval of activation request
- Activation of network access, using the approved configuration template
- Notification of service activation
- Automated scheduling of de-activation request
- End-user request for network service de-activation (port disablement)
- Review and approval of deactivation request
- Deactivation of network access, using configuration template
- Notification of service activation

4. AUTOMATED SUPPORT SERVICE TICKETING

- Single sign-on to CASD allows Network Operations Teams to access and update tickets via Fusion1
- Select fault and performance alerts automatically generate a service ticket
- Selected data from the root cause analysis included in automated tickets
- Manual ticket creation from a dashboard application
- Device mapping across applications speeds up troubleshooting
- Near real-time availability & visibility of tickets by service provider and the customer
- Drill down on tickets for enhanced information and historical data

RESULTS:

Fusion1 is already delivering business benefits across different operational areas:

NETWORK OPERATIONS CENTRE (NOC)

USE	CHALLENGE	SOLUTION	OUTCOME	BENEFITS
Unusual network traffic detected	<ul style="list-style-type: none"> An engineer would be contacted to isolate the specific site. Email communications may already be compromised. 	<ul style="list-style-type: none"> NOC use Fusion1 to automate the site shutdown and subsequent restore whilst the cause of the attack is investigated. 	<ul style="list-style-type: none"> Immediate action. 	<ul style="list-style-type: none"> Immediate lock down minimizes the impact of the potential cyber-attack.
Automating Support Tickets	<ul style="list-style-type: none"> High skilled engineer required to log on (and off) a number of tools to troubleshoot the issue and resolve. Disparate siloed departments may be involved. Accessing templates to populate from different systems. 	<ul style="list-style-type: none"> Integrate Computer Associates Service Desk (CASD) ticketing system with Fusion1. Fusion1 queries and updates systems, i.e. SMARTS, SevOne, Bluecat and CASD. 	<ul style="list-style-type: none"> Log on once – access total view from all relevant tools. Automated ticket creation based on Fusion1 receiving alerts from the integrated third-party tools. Access standard templates that are pre-populated. NOC team triage the ticket and then simply select to activate the automated ticket workflow. Tickets are created automatically based on configuration parameters. Tickets can be created manually directly from the dashboard from selected alerts. Real-time status visibility available across for both the service provider and the Customer based on the role of the user. 	<ul style="list-style-type: none"> Automated approach provides both savings per ticket and reduction in support engineer time. Across operations typical savings of 5-20 minutes per ticket. Increase in efficiencies as tickets are now handled faster by less experienced personnel. Audit trail and SLA metrics available. Automated ticket generation frees up IT resources, and removes delays and human transcript errors.

SERVICE PROVISION

USE	CHALLENGE	SOLUTION	OUTCOME	BENEFITS
Device Discovery	<ul style="list-style-type: none"> Manual device discovery into each of the management systems is time-consuming and prone to human error. 	<ul style="list-style-type: none"> An automated process which is scalable and able to discover devices concurrently across each of the management systems. 	<ul style="list-style-type: none"> This automated process is consistent, real-time and can be immediately reviewed within the Fusion1 Service Portal. 	<ul style="list-style-type: none"> Provide validation, up front, to the service provider NOC of the Customer Authority estate to confirm completion. Single click access provides full and accurate reporting. Identify and reconcile device estate across all tools.
Enable or disable a new Port	<ul style="list-style-type: none"> Manually started process across multiple vendors meant time to market could be up to 90 days. 	<ul style="list-style-type: none"> Implement automated process based on change request ticket. 	<ul style="list-style-type: none"> Template and process driven port enablement removes manual intervention and processing. 	<ul style="list-style-type: none"> Time required reduced from up to 90 days to minutes.
On-boarding a new device	<ul style="list-style-type: none"> Manual, time consuming process requiring expensive, skilled engineers to attend on site. 	<ul style="list-style-type: none"> Simple configuration provision on device. Unskilled engineer only required on-site for physical connectivity. Full configuration automatically pushed to device by Fusion1. 	<ul style="list-style-type: none"> Eliminates possible human error. Immediately recognized and monitored by the underlying management tools and Fusion1. Fusion1 automatically links the device to all the underlying tools utilizing the unique Fusion1 Entity Mapping tool. 	<ul style="list-style-type: none"> Time required to bring new device on line reduced substantially. Reduce the engineering time required on site. Status immediately visible to technical and management teams via the Fusion1 Service portal.

NETWORK OPERATIONS CENTRE (NOC) / SERVICE PROVISION

USE	CHALLENGE	SOLUTION	OUTCOME	BENEFITS
Multiple views of the 'truth' Different systems provided elements of required information.	<ul style="list-style-type: none"> Management systems with inconsistencies in device discovery information hamper effective device management. Risk of devices not being discovered when deployed, or not being discovered consistently in all relevant management systems. 	<ul style="list-style-type: none"> Reconciliation processes are required to reconcile the underlying tools and report discrepancies by exception. Provides consolidated information from multiple management systems, and where related dynamically links them together, with Fusion1 Entity Mapping to a collection of role based dashboards. 	<ul style="list-style-type: none"> All information is real-time and an aggregation of the underlying data from the integrated tools. 	<ul style="list-style-type: none"> Eliminates misunderstandings and provides the full picture in the required level of detail. Provides immediate access to aggregated information related to sites and devices Improved efficiency through single source of data Improves MTTR through speed and accuracy of ticketing

FUSION1 - VENDOR AGNOSTIC

In all of the above situations, Fusion1 is used to combine, view and manage the customer data, enhance its use and ensure accuracy, whilst providing efficiencies through the use of automation. This approach ensures best practice, standardized processes and methodology and is enabling the service provider to offer full management support while empower the customer and exceeding their expectations and requirements. This use case illustrates specific vendor solutions, but Fusion1' vendor agnostic flexibility ensures that the service provider can provide the same levels of integration and automation across different vendor solution.

ABOUT

Federos

Federos provides a next generation, service assurance solution that unifies fault, performance, topology and service level management in a single scalable platform. With the product suite from Federos, you can drive IT and OSS transformation to service-oriented operations and accelerate delivery of new services to increase revenue, while consolidating disparate and legacy tools to significantly reduce operations costs.

THE POWER TO PERFORM

While Fusion1 provides ultimate flexibility and control, understanding the service provider and the customer's requirements is key to our approach. With this knowledge Federos consultants are able to advise and implement new approaches to develop dashboards providing key information visibility, and implement automated processes. This implementation has improved and automated repetitive, time-consuming processes, providing accountability, delivering accuracy of information, increasing uptimes and significantly raising the bar on SLAs.