CUSTOMER

Valmet Automation Ltd

WEB SITE

https://www.valmet.com

INDUSTRY

Installation of industrial machinery and equipment

LOCATION

Espoo, Finland

KEY CHALLENGES

Long life-cycles of automation applications cloud agnosticism is inevitably required. Hence the pure use of public clouds was not an option

The old management practices did not meet the business agility requirements

A platform to support modern ways of working in software development, delivery and support was required

SOLUTION

To enable progressive self-service and sustainable test-driven automation and to automate the delegation of management, Fluentscale's comprehensive Service Delivery Platform was chosen as the enterprise grade XaaS platform.

BUSINESS BENEFITS

The Fluentscale implemented solution had a huge impact on Valmet Automation productivity

A versatile platform to enable Valmet business model transformation to offer SaaS services

Fully Infrastructure as Code driven private cloud platform offering enabling high quality and security combined with optimized OPEX

Fully DevOps enabled and highly automated private cloud to boost productivity and streamline processes for Valmet Automation Business Line

CUSTOMER PROFILE

Valmet is the leading global developer and supplier of technologies, automation and services for the pulp, paper and energy industries. Valmet's vision is to become the global champion in serving its customers.

Valmet Automation Ltd has net sales of about EUR 400 million employing over 1700 professionals globally and is part of Valmet Plc. Valmet's net sales in 2017 were approximately EUR 3.1 billion. Valmet's shares are listed on the Nasdaq Helsinki and the head office is in located Espoo.

THE CHALLENGE

Valmet DNA is a single automation system for all functions – process, machine, drive and quality controls. It covers information management along with mechanical and field device condition monitoring. The single system architecture saves on both costs and effort, while ensuring open growth for Valmet Automation customers' future challenges.

Due to the extremely long life-cycles of automation applications cloud agnosticism is inevitably required. Hence the pure use of public clouds, especially their FaaS offerings, was not an option for Valmet Automation. The customer workloads have to be able also locally in customer facilities and Valmet Automation has to be able to manage these workloads in distributed private and public clouds efficiently. Some of these locations are usually even offline.

The formerly used VMware based virtualization platform was seen as lacking elemental features to support Valmet Automation's modern software development practices involving hundreds of developers. E.g. DevOps capabilities, extended self service capabilities and internal workflows, RBAC, cost show-back and chargeback, multitenancy, API's to manage the workloads, etc.

With the old management practices establishing the network connections took way more time than acceptable to meet the business agility requirements. Especially creating connections between physical and virtual networks could take even 5-6 weeks, depending of the involved IT parties. When processing hundreds or even thousands of customer projects yearly by Valmet Automation this alone created a negative impact on productivity and resourcing problems with tight timetables.

Key high-level requirements were stated to tackle the challenge:

- Valmet Automation required a platform to support modern ways of working in software development, delivery and support and to support lean, agile IT operations
- The new platform was required to support new XaaS based business models like SaaS and IoT, support multi cloud & new business solutions
- The required automation had to be manageable in a sustainable way
- The enablement of DevOps practices and tools to simplify and standardize the management of workloads and publishing process

> "Fluentscale's Service Delivery Platform had a pivotal role as the key enabler of IT infrastructure capability for Valmet Automation's software business."
>
> **Ville Kauppinen**
> **IT Manager**
> **Valmet Automation**
> **Ltd.**

The Solution

To streamline development related processes, like network management, bookkeeping, project creation, etc. and to support CI/CD pipelines and Infrastructure as Code, Valmet Automation chose Fluentscale as their trusted advisor and technology partner due to the solutions, knowledge, experience and vision Fluentscale had to offer.

Since Valmet Automation was deemed to become a service provider, VMware vCloud Director, which has rich features to exploit surpassing Azure and Amazon IaaS offerings in many areas, was chosen as the cloud platform together with VMware NSX Network Virtualization and Security Platform over hyperconvergence infrastructure.

To enable progressive self-service and sustainable test-driven automation and to automate the delegation of management, Fluentscale's comprehensive Service Delivery Platform was chosen as the enterprise grade XaaS platform. The implementation included the Cloud Core Foundation Suite and fluentOE, the Operational Excellence extension module together with Valmet Automation specific customizations.

The full Valmet Automation implementation included the following Fluentscale Service Delivery Platform Modules:

fluentShield
Provides elementary security services for the portals & API's and reduces the attack surface from the Internet and provides services like federation & authentication services, multi-factor authentication and single sign on. FluentShield provides everything required to achieve a "one customer portal" experience for all published online services in a secure and manageable manner.

fluentBilling
The central billing engine concentrating the billing data from different sources and relating the data to the product items.
FluentBilling refines the billing data and serves as a centralized data repository for the systems generating the actual invoices. The supported billing types include Pay as you go, Reserved, and a combination of these

fluentCMP
Offers e.g. a customer specific self-service portal to provide and manage online services, diverse reporting made easy and automation of complex core process workflows with smart forms.
Enterprise grade

fluentIdentity
Provides multitenant self-service portal for tenant, account and role management in an enterprise level environment with even 10 000's of users

fluentOrchestrator
Enables effortless and open service automation and manageable and test-driven orchestration

fluentProtect
Offers the control of snapshots, backups, restores and the capability to offer backup services from single tenant backup backends in a multitenant fashion to tenants

Fluentscale Operational Excellence
Enables operational excellence by leveraging integrated DevOps tools, processes and methods.
Includes a preconfigured system for the management of configurations, resources, source code and projects, container management, key management and provides a framework for identity management.

The solution is supported and continuously kept meeting Valmet Automation requirements with the Fluentscale Managed Services.

"Valmet Automation is pursuing towards cloud agnostic practices, resource optimization and container exploitation expansion with the implemented private cloud as a first-class citizen in the multi-cloud DevOps ecosystem"

SAMI SEPPÄNEN
CEO
FLUENTSCALE LTD.

BUSINESS RESULTS AND BENEFITS

Fluentscale's Service Delivery Platform had a pivotal role as the key enabler of IT infrastructure capability for Valmet Automation's software business.

The Fluentscale implemented solution had a huge impact on Valmet Automation productivity. The production functions previously lasting days being manual and error-prone, are now mostly automated with Fluentscale Service Delivery Platform in minutes.

Due to the infrastructure being managed with the same principles as the applications, the methods support directly DevOps for the whole implementation stacks, and they offer benefits also for the developers of the business applications.

The full Fluentscale implementation enabled Valmet Automation a new modern offering to the business including:

- An internal cloud platform as a first-class citizen in the multi-cloud DevOps ecosystem
- A versatile platform to enable Valmet business model transformation to offer SaaS services
- Fully Infrastructure as Code driven private cloud platform offering enabling high quality and security combined with optimized OPEX
- Streamlined the DNA development processes involving even the external customers
- Modern and exceptionally fast self-service restore and disaster recovery capabilities
- Fully automated networking management (Load Balancing, VPN, routing, firewalls)
- Centralized management portal with support for multiple internal organizations featuring identity management, tenant/VDC ordering, reporting, DNS management, task/repository management, etc.

The Fluentscale Service Delivery Platform also significantly decreases the amount of manual infrastructure management and amount of work required to support software delivery, improves the ticket lead times, improves service quality while the number of manual errors decrease and enables the ability to more easily meet the compliance requirements.

LOOKING AHEAD

Fluentscale is currently utilizing the Service Delivery Platform as the basis of comprehensive platform for IoT both as an all-inclusive and as an easy-to-deploy IoT service provider platform.

To support the long life-cycles of the automation products and solutions, Valmet Automation is pursuing towards cloud agnostic practices, resource optimization and container exploitation expansion with the implemented private cloud as a first-class citizen in the multi-cloud DevOps ecosystem.

FLUENTSCALE LTD

www.fluentscale.fi