www.**vnomic**.com

Vnomic
Automated Engineered SAP Landscape as a Service

Achieving Successful SAP on Azure Deployment & Governance

How a complete standardization and automated engineered workload delivery and governance strategy improves IT efficiency while reducing unplanned downtime and risk in 2020 and beyond

SAP Partner | SAP S/4 HANA | Microsoft Azure | SAP

Abstract: IT modernization efforts often suffer from reliance on manual processes, especially in the complex work of migrating SAP landscape to the cloud. Unexpected negative results include costly, unplanned downtime, security risk exposure and compliance. Vnomic offers a solution. Its automated and engineered SAP landscape delivery and governance platform as a service eliminates manual processes while meeting all SAP and Microsoft performance, security, governance, and compliance requirements.

Introduction

The cloud is a means, not an end.

Companies that migrate enterprise software to the cloud while still relying on manual processes for workload delivery and governance tend to experience costly unplanned downtime. With SAP in particular, the demanding, complex configuration and compliance requirements of the system—along with those of cloud platforms like Microsoft Azure—can be especially challenging. One proven solution is to realize cloud-based IT modernization using a complete standardization and automated engineered workload delivery and governance strategy. With this approach, businesses can gain the benefits of IT modernization, but do so in a way that protects their brands and prevents devastating unplanned downtimes costs.

The High Cost of Unplanned Downtime

Fortune 1,000 companies' enterprise workload downtime could cost as much as $1 million per hour, according to an IDC survey. And, while the typical mid-sized enterprise spends $1 million per year on unplanned downtime, large enterprises can spend up to $60 million or more, according to a research report from IHS. Figure 1 contrasts these levels of expenditure.

Driven by a lack of automated engineered enterprise workload delivery and governance, enterprise workload downtime cost companies worldwide nearly $1.3 Trillion of lost revenues in 2019. As Figure 2 shows, this amount is nearly six times higher than the $214.3 billion cloud services marketplace in that same year. And, these numbers are on the rise worldwide. In 2018, 76 major downtime incidents were attributed to workload misconfigurations. **In 2019, this number rose to 104, a 34% increase.**

Unplanned downtime events are devastating, not only to the organizations, but also to the public that is unable to access services. Moreover, often, when an unplanned downtime makes headlines, it is the company whose reputation suffers, not the underlying cloud service provider.

Figure 1 - Annual Enterprise Workload Downtime Cost

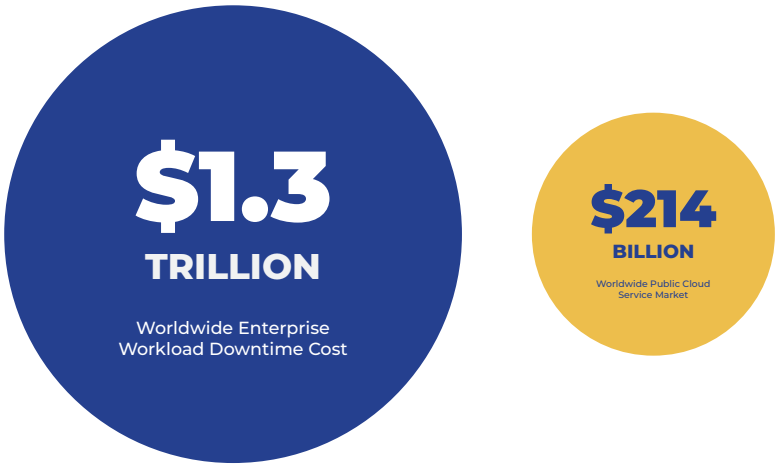

Figure 2 - Enterprise Workload Downtime Cost vs Public Cloud Consumption

Drivers of Downtime

The growth in unplanned downtime directly correlates with rising adoption rates of cloud services. Indeed, experts expect the upward trend to persist as companies continue to adopt cloud services rapidly but rely on manual approaches to enterprise workload delivery and governance measures. In analyzing the 180 major downtime caused by enterprise workload deployment misconfigurations on clouds, researchers validated a Gartner estimate that 99% of the unplanned downtimes was the enterprise's fault.

Most enterprise companies implementing a public cloud strategy are doing so quickly and out of necessity. They need to innovate to maintain a competitive edge, which requires the agility and speed only the cloud can offer. However, the results clearly demonstrate that organizations that lack a holistic approach to automated engineered workload delivery and governance are more vulnerable to unplanned downtime risk caused by:

- **Inexperienced users**
- **Failure to shift from outdated manual processes**
- **Lack of unified automated engineered workload delivery and governance platform**
- **Unprecedented rate of change, scale and scope for enterprise workload deployment and governance**

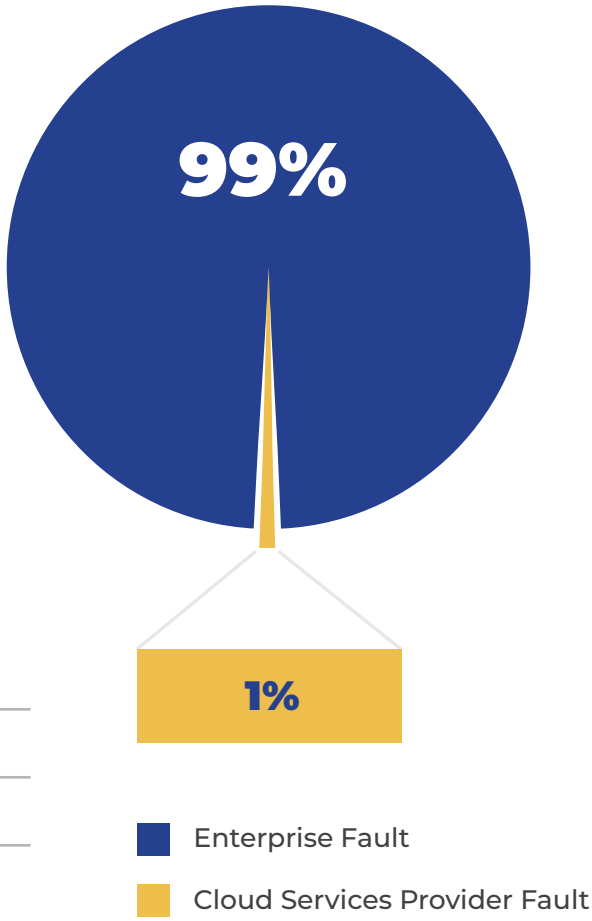

Figure 3 Whose fault caused enterprise workload downtime?

As companies adopted cloud computing, they have largely shifted responsibility for enterprise workload deployment and governance processes away from career IT deployment and governance professionals, who understood enterprise workload security, governance and compliance requirements, to less knowledgeable cloud specialists. At the same time, the pace of deployment has accelerated. Production deployments have gone from quarterly to weekly events.

These enterprise workloads also typically feature continuous integration and deployment (CI/CD) approaches. This has led to massive cloud infrastructures that encompass large numbers of changes that are needed to meet the performance, security and governance of these enterprise workloads. When the deployment of enterprise workloads is done manually, the result is a loss of control. The process, and those who manage it, do not take into account the deployment configuration, security, governance or even compliance—all of which are critical for an enterprise workload deployment.

When it comes to deployment accuracy and consistency, there is a shared responsibility relationship between enterprise and cloud service provider. The cloud service provider is responsible for providing the underlying components of cloud services, a task they typically fulfill without issue. The enterprise is responsible for ensuring how the enterprise workload uses the cloud services, including properly configuring identity and access management (IAM), storage and compute settings, operating systems, and the security of the application and data processed and stored in the cloud. Enterprise's may overlook their responsibilities, a deficiency that drives unplanned downtime.

Figure 4 Enterprise workload deployment and governance complexity

How These Challenges Surface in the SAP Landscape

SAP landscapes are the digital heart of the 50,000 largest companies in the world.

SAP landscapes are the systems of record for these companies, processing trillions of dollars in revenue transactions annually. These companies are looking to deploy their SAP landscapes in the cloud to take advantage of the cloud agility, scalability, and enterprise capabilities.

Unfortunately, as they embrace the dynamic nature of public cloud, most enterprises fail to automate their SAP landscape delivery, governance, and auditability to minimize manual misconfiguration risks. As a result, they are suffering from long time to value, failure to meet project go live dates and many un-planned downtimes. The impacts include billions of dollars in lost revenues and tarnished brands.

These SAP landscapes include many SAP systems and technologies, such as SAP S/4HANA, SAP Business Warehouse, SAP Governance Risk and Compliance (GRC), SAP CRM, SAP Solution Manager, SAP SLT, SAP Data Services, SAP Process Orchestration, SAP Gateway, SAP Enterprise Portal and SAP Web dispatcher as depicted in Figure 5.

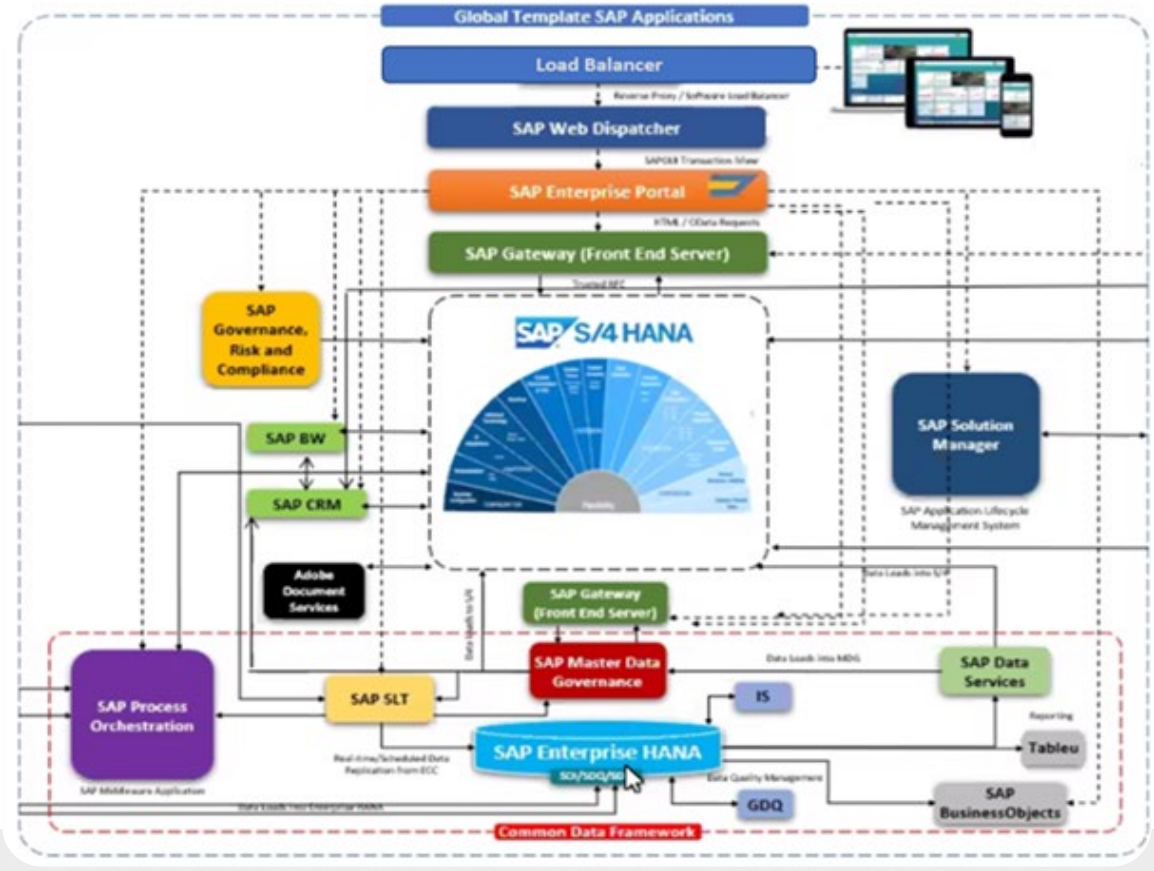

Figure 5 Enterprise SAP landscape

The Vnomic Solution

It is a best practice for SAP companies to adopt automated engineered enterprise workload delivery and governance solution for their cloud-based enterprise workload deployment. This is a proven way to protect their brands and avoid devastating unplanned downtimes costs. Vnomic offers a solution that aligns with this best practice. Its automated and engineered SAP landscape delivery and governance platform as a service eliminates manual processes while meeting all SAP and Microsoft performance, security, governance and compliance requirements.

Vnomic has been co-innovating with SAP and Microsoft engineering teams, leveraging advanced modeling technologies to capture all SAP and Microsoft Azure requirements in Vnomic models along with Vnomic workbooks to eliminate manual processes.

Vnomic workbooks incorporate all SAP and Microsoft Azure requirements and eliminate virtually all potential manual misconfiguration errors. To deploy a SAP landscape, simply enter the SAP landscape information into Vnomic workbook Quick start tab and Vnomic workbook automatically computes all the parameters, bill of materials and costs associated with the landscape that meets all SAP and Microsoft best practices.

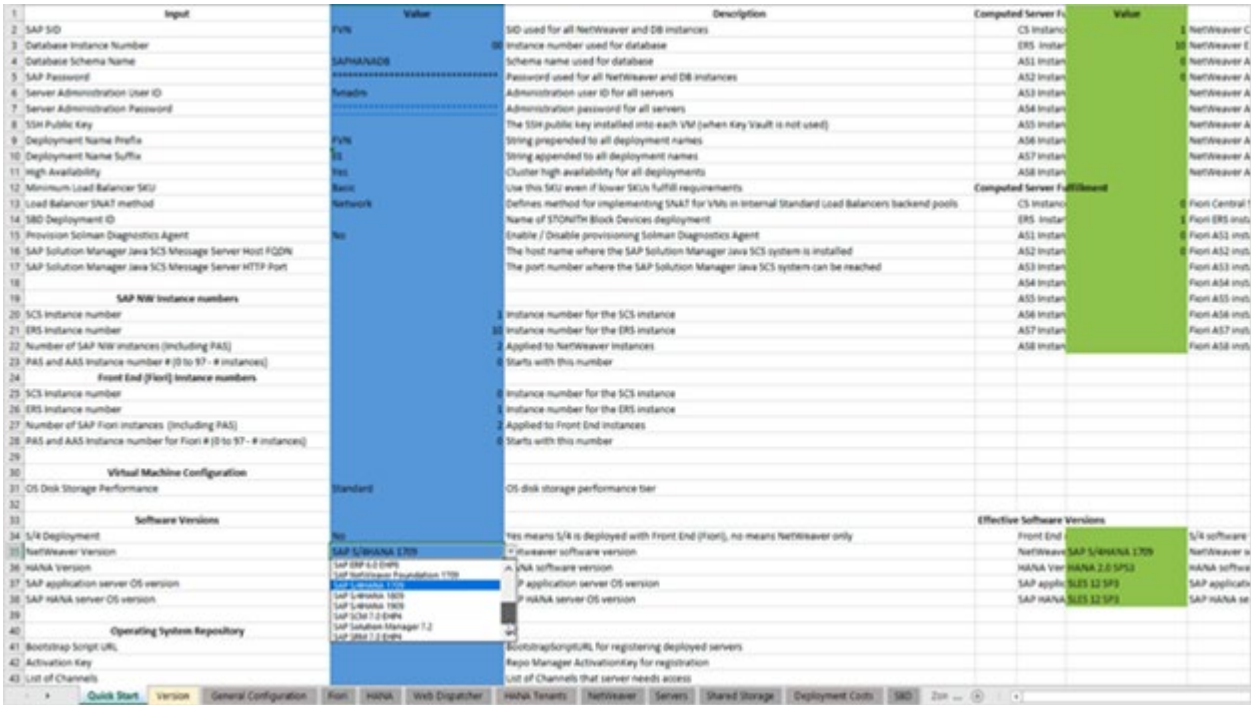

Figure 6 Vnomic workbook

After the SAP landscape configuration has been completed in Vnomic workbook, we can simply upload the workbook onto Vnomic service, where the Vnomic service will compute all the technical requirements while meeting all security, governance and compliance requirements and come up with the best design and builds the landscape. **This is done end to end, with zero touch, while documenting all the build steps to meet the security and governance requirements.**

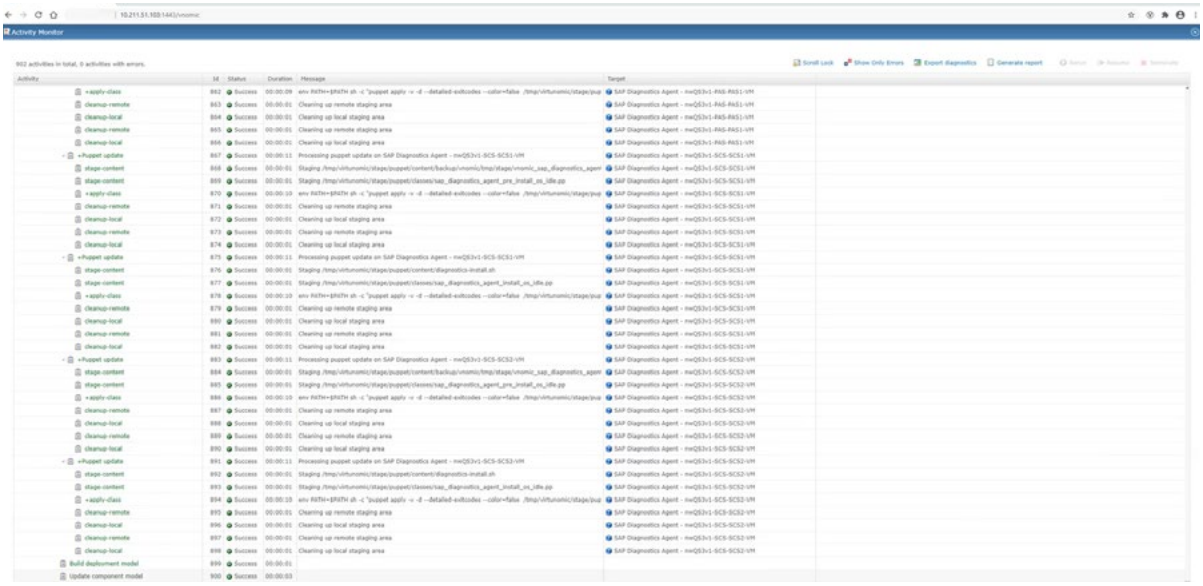

Figure 7 Vnomic automated delivery & governance

When the deployment is completed, the deployed landscape components and their dependencies can be viewed in **Vnomic console** as shown in Figure 8.

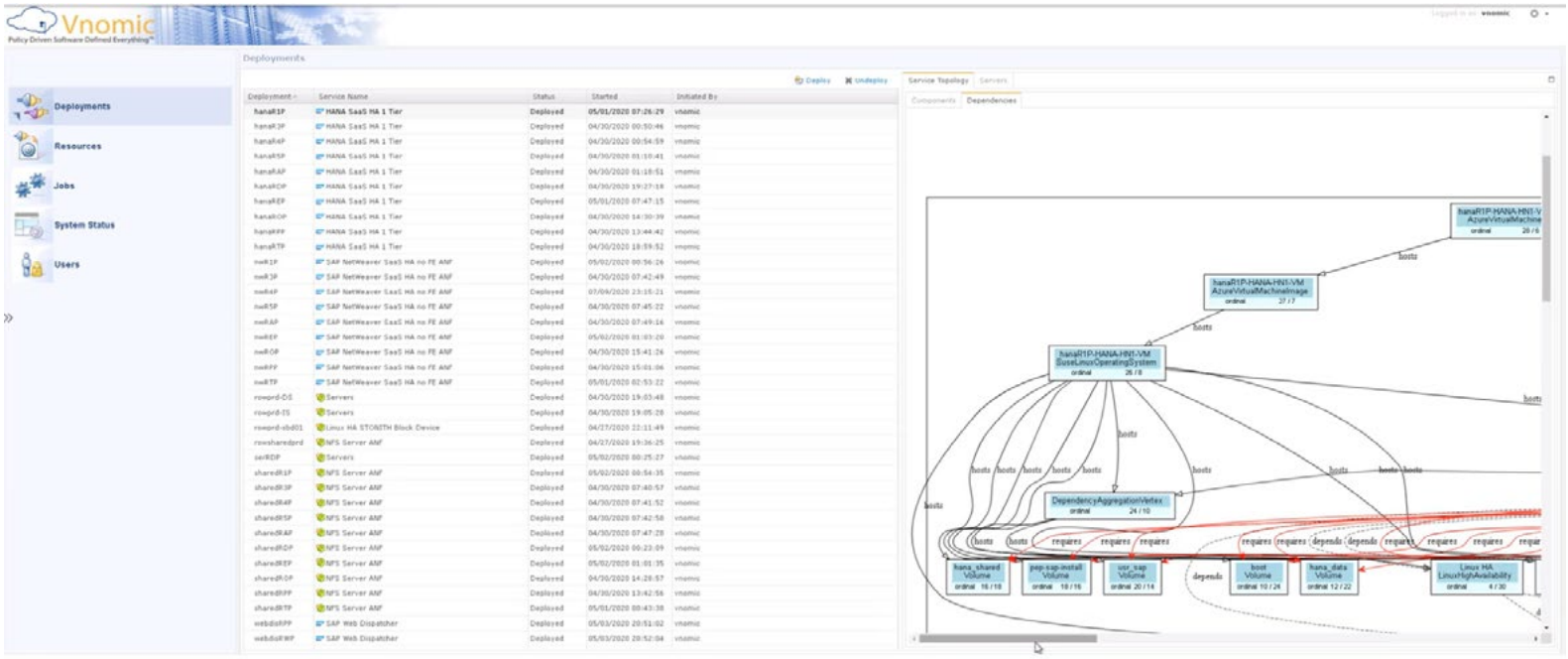

Figure 8 Vnomic deployed SAP landscape and dependency mapping

Please also see **full demonstration** of Vnomic automated engineered SAP landscape delivery and governance platform here.

https://www.youtube.com/watch?v=lngDPJfT5GM

www.**vnomic**.com