White Paper

# IT Agility and Business Alignment: Why You Need a Single Source of Truth

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## IDC OPINION

As enterprises undergo digital transformation to the 3rd Platform, IT will consist of increasingly hybrid IT environments that add significant complexity to IT service and support within the enterprise. In fact, IDC estimates that 85% of enterprises will be multicloud by 2018 in addition to managing owned and colocated physical datacenters.

As a result, IT organizations are under pressure to deliver a higher degree of agility and business alignment while keeping costs under control. Thus savvy IT leaders are quickly discovering that the automation of key service delivery workflows and processes is the only way to improve business user productivity while also increasing operating efficiency and agility and business alignment. For instance, IT professionals are increasingly seeking enterprise tools for service requests, change control, monitoring, security, cloud management, and finance to be integrated with workflows that reduce the need for human intervention.

However, while automation can help drive greater IT staff and cost efficiencies, without a holistic/real-time approach to datacenter inventory management, it is virtually impossible for IT to understand, prioritize, provision, and optimize the dynamic infrastructure and applications essential for mission-critical IT business services. Furthermore, technology trends such as cloud computing, virtualization, containers, converged infrastructures, and software-defined everything are causing a rapid proliferation of IT assets and interdependencies in most enterprises. The proliferation of assets can slow IT response as things like interdependencies, passwords, and service contacts become harder to research.

What's more, this added complexity comes at a time when increasingly heterogeneous IT ecosystems require IT organizations to broker, integrate, and orchestrate the delivery of 3rd Platform services that are mission critical to business operations. Likewise, discovering and inventorying the organizations' datacenter assets are critical first steps in establishing effective systems and security management programs. IT organizations lacking the ability to properly visualize and assess their company's assets to rationalize the IT environment often over procure or under procure resources. For example, effectively determining actual server footprint and enterprise application use in the organization enables the company to make informed decisions about licensing agreements/renegotiations.

To that end, it is virtually impossible to implement efficiencies that result in cost reduction accompanied by increased agility and alignment without a continually updated single source of truth that is used enterprisewide by both personnel and applications. Therefore, managing datacenter

resources in multiple locations is becoming ever more critical, and businesses must know what all the assets are as well as where they are, what condition they are in, and the financial ramifications of their use. A disconnect not only accelerates security and investment risk but also raises cost and diminishes the value of technology used to achieve desired business outcomes.

With the enterprise's increasing push toward digital transformation, IT executives need visibility into the hardware and software that support mission-critical business services and processes. Thus, to optimize and secure the systems and services underpinning essential business processes, IT organizations must expand their infrastructure management practices far beyond static inventory spreadsheets and manual processes.

Therefore, IDC recommends that IT organizations employ people, processes, and tools that can aid in effectively addressing the increasing levels of complexity in how business users seek to access and consume technology resources.

## SITUATION OVERVIEW

According to recent IDC research, enterprises worldwide will spend $2.1 trillion in 2019 on technology and related services to implement and manage digital transformation initiatives. IDC defines digital transformation as the continuous process by which enterprises adapt to or drive disruptive changes in their customers and markets by leveraging digital competencies to innovate new business models, products, and services that seamlessly blend digital, physical, business, and customer experiences while improving operational efficiencies and organizational performance.

Businesses' need to leverage a mix of 3rd Platform technologies to maintain competitive advantage is creating ever more demanding end users, increasing security issues, and reducing IT's ability to govern users to ensure compliance with corporate policy. Likewise, traditional approaches to managing and servicing IT are often viewed as too slow, while business organizations need speed. As a result, line-of-business (LOB) executives are taking charge of their destiny. Recent IDC surveys show that 43% of LOB business managers are driving their own tech projects, with little to no involvement of internal IT, because they are comfortable with technology.

The proliferation of disparate hardware platforms, operating systems, and applications in the enterprise not only increases the complexity of IT operations but also increases the risk of security attacks. The continued surge in the number of obsolete IT assets creates open doors to cyberattacks, which often take advantage of the high vulnerability of end-of-life (EOL) IT systems that have ceased to receive product updates and security patches from vendor sources.

Compounding the difficulty of rapid resolution to such threats is the inability to understand what constitutes the enterprise's IT "connected" assets and identify the risk impact from unknown or out-of-date software and hardware. IT administrators are often challenged with meeting SLAs and remediating issues when relying on manual processes and/or disaggregated systems management tools for provisioning, configuring, securing, and accounting for both hardware and software assets. Thus IT organizations are quickly discovering the need for solutions that can seamlessly scale with the rapid proliferation of datacenter resources and software platforms in the enterprise. To that end, to avoid being relegated to a legacy system maintenance role, IT organizations need to realign their business model around a new service business that combines 3rd Platform technology and internal IT services to reduce costs and increase IT functionality via automation. Likewise, IT staff must emerge as service brokers tasked with delivering IT as a service. IDC defines IT as a service as the ability to

efficiently and effectively deliver a hybrid of on-premises and cloud-based services to end users based on a deep understanding of business needs as well as organizational cost and compliance.

To execute this "run IT as a service broker" game plan, IDC recommends that datacenter inventory management initiatives are viewed holistically across several key IT disciplines to include IT security, enterprise architecture, portfolio management, change and configuration management, and IT financial management.

## Market Drivers of Continuous Discovery

The increasing need for IT organizations to efficiently and effectively broker, integrate, and orchestrate the delivery of complex and dynamic IT systems and services to include virtualization, containers, and software-defined technologies that are mission critical to business outcomes will continue to fuel growth in this market.

The following factors are key drivers for businesses to use continuous discovery and datacenter inventory management solutions:

- Better aligning IT systems and services with the digital transformation initiatives of the business
- Enabling IT staff time savings and efficiencies via improved visibility, deeper understanding of datacenter assets and dependencies, automation, and faster resolution of problems
- Simplifying IT management and reducing cost of operations
- Delivering critical services to end users and customers faster with higher SLAs
- Making software and other auditing efforts more efficient and cost effective, and reducing the costs of failed software audits

Therefore, IDC believes that it behooves IT leaders to reposition themselves from technology implementers to strategic planners, helping the business budget for technology spend and make wise investments for the future while simultaneously driving real business value from current investments. In fact, IT is increasingly measured based on service consumption as opposed to operational activity or project results and must clearly express the value of IT services in terms of business value creation. Thus, to fulfill the role of the value of service brokers (charged with understanding, measuring, and optimizing the value of technologies investments), IT staff need one thing above all others: real-time visibility.

### *Continuous Datacenter Inventory Management*

You can't manage what you don't measure — thus discovering, inventorying, and mapping the organization's IT assets to business services are critical first steps in establishing effective systems and security management programs.

The assurance of up-to-date clean asset data and asset interdependencies to properly assess the utilization, performance, and currency of IT resources can significantly enhance the reliability and value of the technology services consumed by the business.

The benefits of holistic IT infrastructure management (spanning on-premises, public cloud, and hybrid cloud environments) are as follows:

- Allow IT to mitigate operational and financial challenges associated with moving datacenter assets for consolidation, cloud, and virtualization projects.

- Optimize workload performance across hybrid IT environments.
- Monitor and meter consumption and utilization for charge-back and service provider accountability.
- Improve datacenter security and compliance.
- Minimize change risks by empowering the change advisory board (CAB) with trusted dependency data to evaluate change impact.
- Dynamically match resources to demand.
- Provide a single source of truth for all core IT applications via automation.
- Respond faster and with less expense to tickets and business requirements.

## Risk Mitigation

Deficiencies in IT infrastructure management programs and practices can leave organizations vulnerable to security gaps, which can lead to the compromise of sensitive corporate data as well as failed regulatory compliance audits.

Disparate hardware platforms, operating systems, and applications in the enterprise not only increases the complexity of IT operations but also increases the risk of security attacks. For instance, all it takes is one exposed security vulnerability on a single system to compromise sensitive corporate data as well as allow unauthorized entry into the company's entire network.

Effective risk management best practices dictate that IT security plans not only leverage clear, accurate, and real-time visibility into all assets but also encompass the management and ongoing maintenance of those assets. Therefore, the first step in establishing an effective IT systems/security management program is to conduct an all-inclusive asset discovery and inventory scan to identify all the assets within the organization and their current location and status.

The assurance of up-to-date clean asset data to properly assess the vulnerability of existing software and hardware can be a significant enhancement to the effectiveness in managing cybersecurity.

## IT Infrastructure Cost Reductions

Recent IDC studies estimate that by 2020, over two-thirds of enterprise IT infrastructure and software spending will be for cloud-based offerings. The lack of proper planning for cloud migrations, big or small, can carry significant business risk such as runaway costs and unnecessary downtime. As a result, IT organizations are quickly discovering that the awareness of exactly how many systems and applications are in the environment as well as their current location and their warranty status can significantly reduce unnecessary cost, waste, and risks.

For example, modern 3rd Platform technology trends are increasing the complexity and importance of software license compliance as licensing models become ever more convoluted as they evolve and vary based on usage, from traditional client/server instances to virtual and cloud-based infrastructures. Therefore, managing datacenter resources in multiple locations is critical, and organizations must know what assets they have as well as their current location, what condition they are in, and the financial ramifications of their use. IT organizations lacking the ability to properly visualize and assess their company's assets to rationalize the IT environment often over procure or under procure both hardware and software assets.

Effectively determining actual server footprint and enterprise application use in the organization enables the company to make informed decisions about datacenter hardware and software

consolidation as well as public cloud, virtualization, containers, and converged infrastructure opportunities.

IDC recommends that IT infrastructure management initiatives focus on the demands of several key IT disciplines to include IT asset management, IT security, enterprise architecture, portfolio management, change and configuration management, and IT financial management.

### *Business Productivity*

IDC estimates that by 2020, 50% of the Global 2000 companies will see the majority of their business depend on their ability to create digitally enhanced products, services, and experiences. And while public cloud deployment models are adding significant data security and governance complexity to IT operations, the elasticity, flexibility, reliability, and opex pricing benefits that cloud offerings provide are not lost on business leaders.

However, increasingly complex and heterogeneous IT ecosystems challenge IT organizations with the responsibility of brokering, integrating, and orchestrating the delivery of 3rd Platform IT systems and services that are mission critical to business operations or involve privacy issues for protected information. Without a holistic approach to datacenter inventory management, it is virtually impossible for IT to visualize, understand, prioritize, and optimize the dynamic infrastructure and applications essential for mission-critical IT business services.

Furthermore, a disconnect in the holistic visibility between IT services running on-premises and those in the cloud not only accelerates security and investment risk but also raises cost and diminishes the value of technology used to achieve desired business outcomes. For that reason, IT organizations must expand their infrastructure management practices far beyond static inventory spreadsheets and manual processes.

By leveraging a comprehensive datacenter inventory management solution that offers visibility into all the systems and applications in the organization, IT administrators can reduce the unnecessary security risks as well as financial and operational inefficiencies associated with the over/under purchasing of IT systems and applications. Inadequate IT purchasing and asset management practices can have detrimental implications on a firm's bottom line.

## Device42 Discovery Solution

As organizations increasingly embrace 3rd Platform technologies, IT operations teams will continue to be challenged with maintaining and improving end-to-end service levels while the diversity, scale, and scope of the underlining infrastructure continue to escalate.

Today, many IT organizations remain siloed, with individual teams and/or administrators having little or no visibility into root cause and cross-system dependencies, hindering effective root cause analysis and MTTR. To improve operational efficiency and hold head count and staff costs in line with budgetary expectations, IT departments will need to transform the way they delegate responsibilities for managing an increasingly dispersed and disparate technology landscape. Allowing a wide range of technology specialists to collaborate and troubleshoot effectively will be a critical enabler of efficient and agile IT operations teams.

To that end, Device42 offers solutions that automatically discover datacenter inventory, configuration, and relationship data and map business applications to the IT infrastructure, enabling IT with a continuous/holistic view of its systems and how it delivers business services.

### *Device42 Key Capabilities*

Device42 also provides a central repository for all information about IT assets such as warranty and service locations, rack and room maps, and vendor contact numbers. For example, Device42 has hundreds of predefined fields for device information as well as an unlimited number of user-defined fields. Data that can't be discovered is populated via forms, spreadsheet imports, and APIs.

Device 42 enables rapid discovery, relationship modeling, correlation, visualization, and root cause analysis across geographically dispersed datacenter resources — scaling for physical, virtual, and cloud infrastructures. By enabling this level of continuous discovery and visibility, Device42 allows IT to mitigate key challenges associated with moving datacenter assets for consolidation, cloud, and virtualization projects.

What's more, integrations with a wide range of third-party systems and management tools provide operators with a unified view of system/service performance, which stands to reduce the cost and time associated with preparing for audits and preventing audit-related penalties. Likewise, by providing self-customizable portals and reports for specific roles and needs across NOC specialists and subject matter experts, IT professionals can quickly and accurately assess the source of a problem and/or vulnerability and improve their response times to critical issues.

To that end, rather than relying on staff to manually correlate information from separate management tools, with Device42, IT organizations can adopt a more integrated infrastructure management approach that enables them to shift their focus toward delivering consistent end-to-end service levels, thereby improving service levels and end-user satisfaction. For instance, by mitigating the number of incidents caused by changes while simultaneously reducing the time to isolate root causes of issues, IT staff can devote greater amounts of time and energy to proactive value-added activities rather than reactive troubleshooting and remediation tasks.

Furthermore, with Device42, IT organizations can prioritize incidents based on business impact and restore services faster by replacing dependence on tribal knowledge with up-to-date configuration and relationship data.

## CHALLENGES/OPPORTUNITIES

Since IT operations management costs are usually associated with deep overhead costs, or are not billed back to customers, it is not always easy to demonstrate the value of datacenter inventory management until hard metrics are available to identify existing hardware and software costs.

In that sense, like many IT management software vendors, Device42 needs to help its customers effect cultural and process changes while they update, expand, and integrate infrastructure management solutions to accommodate increasingly complex network, system, and application monitoring requirements and dependencies.

Customers that want to get the most benefit out of their investment in Device42 should plan to tackle cultural, process, and workflow integration activities on a coordinated basis at the same time they deploy more unified and integrated IT management solutions.

IT executives must be made aware that a business case can be successfully made around IT infrastructure management solutions, which must increasingly focus on mitigating the complexities associated with the rapid adoption of virtual, cloud, and mobile computing technologies in the

workplace. However, that business case must revolve around not just the savings associated with datacenter inventory management solutions but also being able to embrace digital transformation initiatives that stand to help drive business growth imperatives.

Likewise, while cybersecurity is increasingly a key driver and the budget-enabling catalyst for funding datacenter inventory management solutions, the enterprise will subsequently realize other outcomes and benefits dealing with financial IT management, hardware and software life-cycle management, portfolio management, and configuration management — thereby enhancing the whole IT continuous infrastructure management value proposition.

Thus Device42 must continue to clearly articulate the unique benefits IT organizations stand to gain by leveraging a holistic/continuous approach to datacenter inventory management versus the usage of multiple disjointed point products. For example, it will behoove the company to educate the market on how leveraging its continuous discovery solution and third-party integrations can enable its customers to view datacenter resources in a business service context and in turn ensure a wide range of software and hardware platforms remain optimized, secure, and compliant.

## CONCLUSION

IDC's research indicates that IT leaders are quickly discovering that to maintain optimal system performance and data protection, traditional IT systems management functions such as device, network, and application discovery, inventory, and software and hardware asset management and security tasks are more critical than ever. As a result, visibility to discover, assess, and update IT asset information and asset interdependencies is becoming ever more critical in establishing effective datacenter inventory and security management programs.

However, IT departments are encountering significant challenges with maintaining accurate accountability of the organization's assets and their interdependencies as these assets increasingly span on-premises and public and private cloud environments.

While the utilization of manual processes and spreadsheets may appear to have less up-front costs, they are often associated with significant long-term financial and legal consequences. Deficiencies in IT datacenter inventory management programs and practices can leave organizations vulnerable to security gaps, which can lead to the compromise of sensitive corporate data as well as failed regulatory compliance audits. Therefore, IDC recommends that IT organizations seek holistic and continuous IT datacenter infrastructure inventory management solutions that provide flexible scanning options and comprehensive discovery, identification, and analysis of connections made to corporate networks.

What's more, datacenter inventory management solutions should provide visibility and accountability of all systems and services and their interdependencies, regardless of platform and hosting location, and enable more flexible, agile, and efficient IT operations teams to ensure higher end-to-end service levels keep up with the needs of the business. Without an always up-to-date inventory, service levels will suffer while the cost of IT operations trend upward.

Device42's continuous discovery technologies allow IT organizations to be more responsive to business needs by helping ensure the datacenter infrastructure underpinning the business' digital services is optimized, secure, and in compliance with industry and regulatory mandates.

## About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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