STREAMLINED IT OPERATIONS WITH DESIRED STATE CONFIGURATION

Abstract

The widespread recognition and acceptance of the cloud and the value it brings made it an important part of organizational strategies. An increasing number of organizations today, are adopting Microsoft 365 as part of their workplace's post-pandemic digital transformation.

As enterprises adopt the diverse tool sets in the Microsoft 365 platform, many experience hurdles when it comes to managing the platform. This is due to increasing enterprise size and subsequently rising complexities. Large-sized organizational set-ups end up having a greater number of administrators, leading to the most common threat of environmental misconfiguration and related challenges. It becomes imperative then to monitor and control the multiple changes being made to various service configurations, making M365 management somewhat cumbersome and something that demands careful planning.

A robust mechanism can ensure that the changes are monitored, controlled, and reversed if needed. M365, while offering a dependable business solution, could do with mechanisms and built-in features that would effectively protect against any impact caused by misconfiguration or change approval process.

In this thought paper, we offer a view on how Desired State Configuration can enable organizations to define and enforce configurations for various M365 services.

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How Desired State Configuration (DSC) enable enterprises?

Organizations are leveraging M365 management solutions to embrace the future of work with infrastructure as code for continuously monitoring and protecting the M365 tenant and the various service configurations. IT changes are inevitable for organizations of any size. Changes whether minor or major, standard, or emergency, can result in severe business consequences if not handled with careful planning and streamlined execution.

As organizations seek to maintain compliance with current rules and standards while also keeping up with the continuous emergence of new regulations, they are struggling to manage this change on a day-to-day basis. What could help is an additional requirement from the solution - a mechanism to inform the stakeholders of any discrepancies in configuration and revert the platform to a baseline state.

Desired State Configuration (DSC) enables this and bridges the gap by delivering standard processes to help record, review, approve, and implement new configuration changes in an integrated manner. DSC provides a comprehensive and complete governance solution to make M365 tenant configuration simple and stable. The DSC enables configuration as code and helps streamline the management and configuration of the system, continuously monitors, and protects M365 tenants and the various workload configurations, making it easier to maintain and ensure consistency across the infrastructure. In this way, you can minimize the change cycle time and its impact on everyday operations.
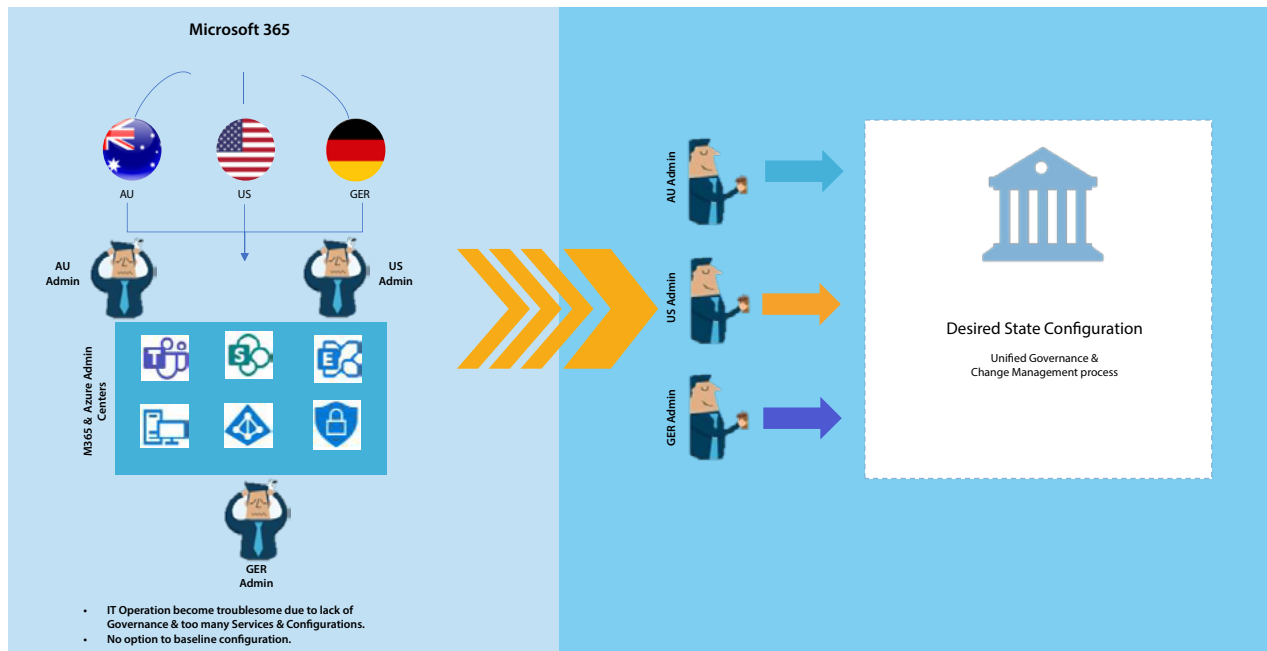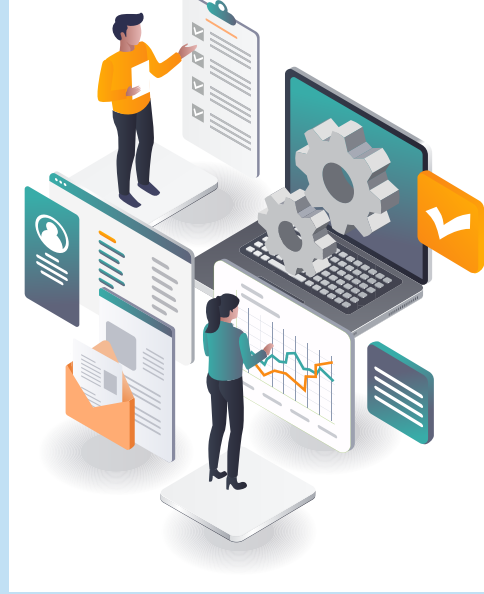

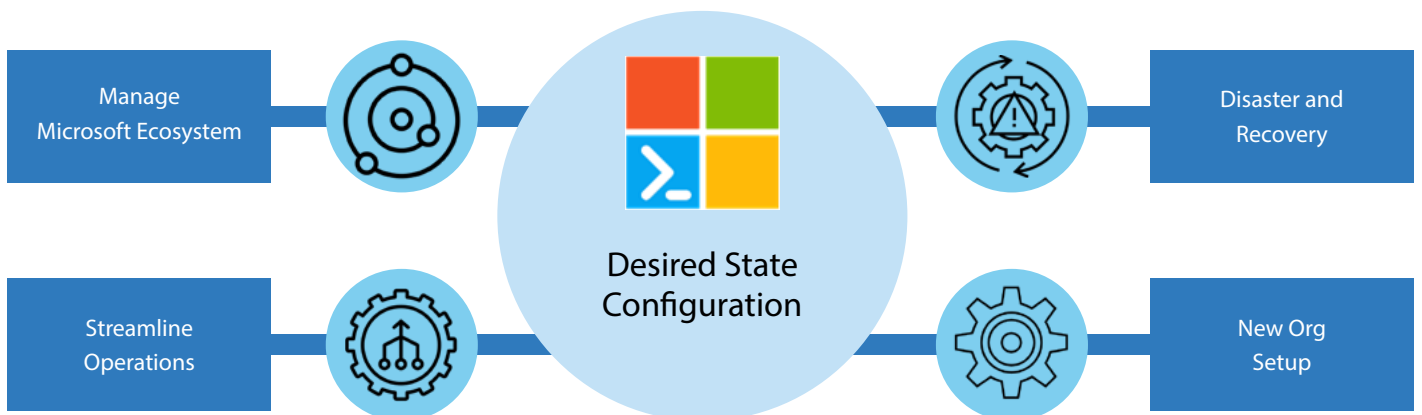*Figure 1 – Enterprise Challenges*

Figure 2 – Streamline M365 Management with DSC

An Integrated Offering to Streamline Operations and Simplify M365 Administration

Desired State Configuration offers comprehensive governance capabilities to effectively manage tenant configuration across various Microsoft 365 services and the Azure platform. DSC includes the ability to :

1. Maintain Compliance

Baseline tenant configuration for an organization by preventing administrators from making changes directly in M365 admin centers and avoiding accidental changes in M365 services. It detects tenant configuration drifts and auto-corrects to a desired state

Helps to bring robust governance process in change management with approval workflow for automated deployments of configuration changes

Continuously enforce compliance with minimal manual intervention

2. Improve Visibility

Provides single pane view of configuration details from multiple M365 services and multiple M365 tenants

A robust consolidated view offers detailed insight into tenant configurations, baseline configuration, and drifts and helps to identify blind spots

Provides enhanced visibility of the service configurations and helps to identify configurations that could impact business operations

3. Disaster and Recovery

Roll back tenant configuration to the previous state using configuration backups

Manage Microsoft Ecosystem

For larger organizations, the management of multiple platforms and tenants becomes complex due to their presence in multiple geographical locations and the involvement of multiple administrators across different regions.

DSC empowers organizations to effectively oversee their multiple M365 and Azure tenants, bringing together diverse platforms and services into a unified and integrated umbrella and seamlessly integrating with a wide array of market tools, ensuring compatibility and extending its functionality. Organizations can achieve streamlined and efficient management across their entire ecosystem.

Desired State Configuration

Admin Centers

M365 & Azure Tenant - 1   M365 & Azure Tenant - 2   M365 & Azure Tenant - N
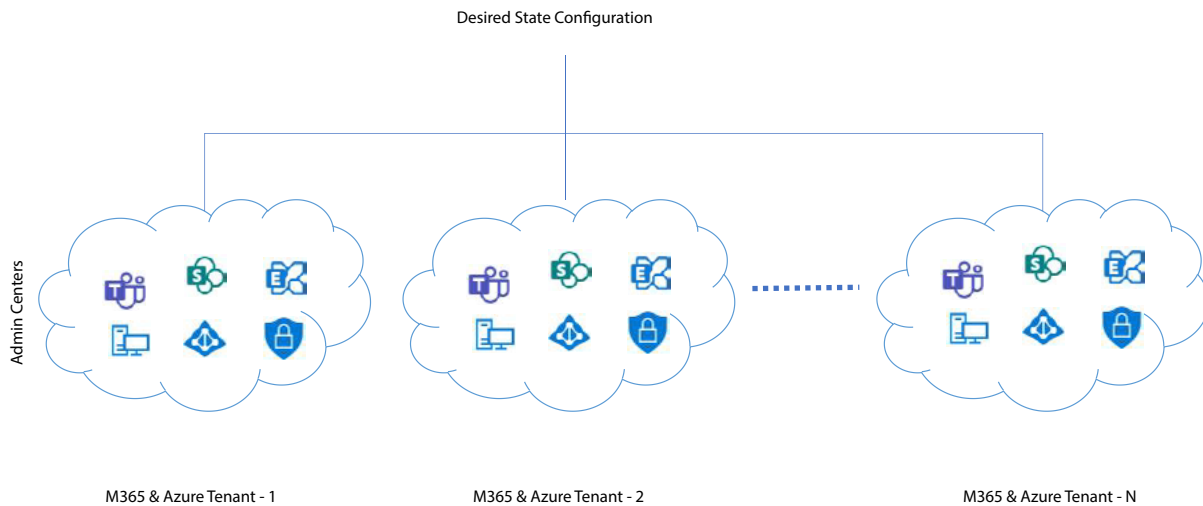
New Organization Setup

Greenfield IT implementation and configuration were predominantly manual processes with high vulnerability to errors, unreliability, and inability to support agile business. To address these concerns, business leaders want to ensure IT platform is managed securely and organizational governance policies are implemented in a structured manner.

Built-in best practice configurations that can be tailored and baselined based on client governance needs.

Helps to carve out new organizational M365 tenants and Azure platform at a rapid pace in a standardized and automated manner.

If a client has multiple subsidiaries and wants provision for new tenants, DSC helps to streamline automation in the tenant provisioning process.

DSC Success Story

Streamlined M365 Change management for a leading agriculture company with the Infosys DSC solution

The APAC client was looking for ways to streamline the monitoring and control for the multiple M365 management consoles and have a central location to back up their tenant configuration. Infosys DSC Solution introduced **Continuous Monitoring and auto-remediation** capabilities that have helped **reduce operational costs by 15% and Change Management and approval automation** cut maintenance efforts by **25%.** The DSC portal has also enabled admin configurations in a **single pane view** to provide a better admin experience and increase productivity. **Environment Synchronization** keeps all the tenants (Dev, QA, Prod) configurations in sync and regular snapshots can be used to restore to the Microsoft 365 tenant or compare one snapshot to another.

The Future of Desired State Configuration

Companies have increased their focus on innovation and are now actively looking to use desired state configurations to modernize IT operations. With the ability to be customized and expanded to enterprise applications beyond M365 and Azure to help organizations maximize efficiency, the DSC framework promises great potential.

About the Authors

Raman

Senior Technology Architect at Infosys

He has 16+ years of experience in IT and has performed a wide variety of roles across the globe. He is mainly focused on architecture, application migration, solutions, and development in Microsoft technologies. Raman can be reached at Raman_Nambirajan@infosys.com

Ram

Principal Consultant at Infosys

He is an experienced Data Professional with 17+ years of experience in the software industry. His areas of expertise include Data Warehousing, Data Modeling, Data Integration, and Business Intelligence. His area of research and interest is around Multi-Model Databases. Ram can be reached at Ramachandran.v@infosys.com

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For more information, contact askus@infosys.com