The Hybrid Datacenter A Strategic Look At Managing Solaris, AIX, and Linux Together

Joseph Rodrigues
Mangalore University

Abstract: Hybrid datacenters that integrate Solaris, AIX, and Linux platforms have become essential for enterprises seeking to balance legacy system stability with modern digital transformation initiatives. Each operating system offers unique strengths: Solaris provides scalable virtualization and advanced file system capabilities, AIX delivers enterprise-grade reliability and partitioning for mission-critical workloads, and Linux offers flexibility, open-source adaptability, and cloud-native support. Managing these diverse environments requires strategic planning, robust automation, and cross-platform orchestration to ensure performance, security, and operational efficiency.This review article provides a comprehensive analysis of hybrid datacenter architecture, virtualization, storage, networking, monitoring, security, and automation strategies. It examines best practices for workload optimization, multi-OS integration, and resource management across heterogeneous environments. Case studies from the financial and healthcare sectors illustrate practical implementations, highlighting challenges, lessons learned, and strategies for achieving high availability, compliance, and cost efficiency. Emerging trends such as AI-driven resource optimization, cloud integration, containerization, and predictive analytics are explored to provide insights into the future of multi-OS datacenter management. By synthesizing technical and operational considerations, this review equips IT professionals with knowledge to design resilient, scalable, and secure hybrid datacenters. The article emphasizes strategic workload placement, standardized procedures, centralized monitoring, and automation as key enablers of sustainable operations, ensuring that enterprises can maintain operational continuity while adapting to evolving technological and business demands.

Keywords-Hybrid Datacenter, Solaris, AIX, Linux, Multi-OS Management, Virtualization, Workload Optimization, Storage Management, Networking, Monitoring, Automation, Orchestration, Cloud Integration, AI-Driven Resource Management.

I. INTRODUCTION

Overview of Hybrid Datacenter Environments

Modern enterprises increasingly rely on hybrid datacenters that combine multiple operating systems, including Solaris, AIX, and Linux, to support diverse workloads and critical applications. Hybrid datacenters enable organizations to optimize infrastructure utilization, maintain legacy system compatibility, and integrate new technologies such as cloud and containerized environments. Managing such heterogeneous environments presents both technical and operational challenges, requiring robust strategies for workload orchestration, performance tuning, and security management. Effective hybrid datacenter management ensures high availability, scalability, and operational efficiency while balancing the needs of legacy and modern systems.

Importance of Multi-OS Management in Enterprise IT

Solaris, AIX, and Linux each provide unique features tailored to enterprise workloads. Solaris is known for its scalability, advanced file system (ZFS), and robust virtualization through Logical Domains (LDOMs). AIX offers enterprise-grade reliability, strong performance for mission-critical applications, and sophisticated LPAR-based virtualization. Linux, particularly distributions such as RHEL, CentOS, and Oracle Linux, offers flexibility, open-source adaptability, and broad ecosystem support. Integrating these operating systems into a cohesive datacenter requires careful planning, standardized management practices, and cross-platform

orchestration to ensure consistent performance and security.

Objectives and Scope of the Review

This review article provides a strategic analysis of managing Solaris, AIX, and Linux within hybrid datacenter environments. It examines architecture, virtualization, storage, networking, monitoring, security, and automation strategies to help enterprises optimize multi-OS operations. The review also evaluates real-world industry implementations, highlighting lessons learned, best practices, and emerging trends such as AI-driven resource optimization, containerization, and cloud integration. By synthesizing technical and operational insights, this article aims to guide IT decision-makers in designing resilient, efficient, and scalable hybrid datacenters that support both legacy workloads and modern digital transformation initiatives.

II. ARCHITECTURE OF HYBRID DATACENTERS

Solaris Infrastructure and Best Practices

Solaris remains a cornerstone for enterprise workloads requiring high availability and robust virtualization. Its architecture leverages Logical Domains (LDOMs) to partition hardware resources, enabling multiple isolated operating environments on a single physical server. ZFS provides advanced file system capabilities, including snapshots, data integrity checks, and storage pooling, which are critical for maintaining data consistency across hybrid datacenters. Best practices involve careful LDOM resource allocation, regular performance monitoring, and integration with centralized management tools to ensure consistent operations across on-premises and cloud-connected environments.

AIX Architecture and Enterprise Considerations

AIX is designed for mission-critical applications, offering enterprise-grade reliability, scalability, and security. Its logical partitioning (LPAR) architecture allows dynamic resource allocation and fault isolation, ensuring high availability for critical workloads. AIX also provides advanced performance tuning options, workload prioritization, and robust system management through tools like SMIT and HMC (Hardware Management Console). In hybrid datacenters, AIX integrates with both Solaris and Linux platforms, requiring standardized protocols for networking, storage access, and authentication to maintain operational cohesion.

Linux Variants in Hybrid Environments

Linux distributions, including Red Hat Enterprise Linux (RHEL), CentOS, and Oracle Linux, offer flexibility, open-source adaptability, and broad ecosystem support. Linux serves as a versatile platform for both traditional workloads and modern cloud-native applications, often acting as the bridge between legacy systems and containerized or microservices architectures. Standardized package management, kernel tuning, and security policies ensure that Linux servers operate efficiently alongside Solaris and AIX, providing consistent performance and reliability across the hybrid environment.

Multi-OS Integration Strategies

Integrating Solaris, AIX, and Linux requires a unified approach to networking, storage, authentication, and monitoring. Strategies include standardizing protocols, implementing cross-platform orchestration tools, and leveraging virtualization technologies to abstract underlying hardware. Shared storage solutions, centralized authentication (e.g., LDAP or AD), and unified monitoring platforms allow administrators to manage multi-OS environments effectively. Adopting automation and configuration management ensures consistent deployment, reduces human error, and enables scalable operations, forming the backbone of resilient hybrid datacenter architectures.

III. VIRTUALIZATION AND WORKLOAD MANAGEMENT

Logical Domains (LDOMs) in Solaris

Solaris Logical Domains (LDOMs) provide advanced virtualization capabilities by partitioning a single physical server into multiple isolated virtual environments. Each LDOM functions as an

independent operating environment, with dedicated CPU, memory, and I/O resources. This approach allows enterprises to consolidate workloads, improve resource utilization, and maintain high availability for critical applications. LDOMs also support dynamic resource allocation, enabling administrators to adjust performance parameters in real-time based on workload demand, which is essential in hybrid datacenter scenarios where resource efficiency directly impacts operational costs.

AIX Logical Partitions (LPARs)

AIX leverages Logical Partitioning (LPAR) to optimize server utilization while maintaining strong isolation between workloads. LPARs enable dynamic allocation of processing power, memory, and I/O resources to individual partitions, ensuring predictable performance for mission-critical applications. Enterprise tools such as the Hardware Management Console (HMC) provide centralized control, monitoring, and automated failover for LPAR environments. By isolating workloads within LPARs, AIX supports disaster recovery, high availability, and simplified maintenance across hybrid datacenters integrating multiple operating systems.

Linux Virtualization Options

Linux supports diverse virtualization technologies including KVM, Xen, and VMware, which allow flexible deployment of virtual machines across hybrid datacenters. Linux virtualization enables rapid provisioning, scalability, and workload migration between physical and cloud-based infrastructures. Additionally, containerization platforms such as Docker and Kubernetes further extend Linux's capabilities, allowing microservices architectures and lightweight, portable deployments. These features make Linux a critical bridge between legacy systems (Solaris and AIX) and modern cloud-native applications, supporting efficient workload management in hybrid environments.

Workload Placement and Optimization

Effective workload management requires strategic placement across Solaris, AIX, and Linux platforms.

Enterprises must consider resource availability, performance requirements, redundancy, and operational dependencies when assigning workloads to virtualized environments. Tools for performance monitoring, capacity planning, and predictive analytics assist administrators in optimizing resource allocation. Combining virtualization with automation ensures workloads run efficiently, minimizing bottlenecks and enhancing overall datacenter resilience. This integrated approach supports business continuity, operational efficiency, and cost-effective hybrid datacenter operations.

IV. STORAGE AND I/O MANAGEMENT

SAN/NAS Integration Across Multiple OS

Hybrid datacenters require storage solutions that can serve Solaris, AIX, and Linux simultaneously. Storage Area Networks (SAN) and Network-Attached Storage (NAS) provide centralized, high-performance storage accessible across multiple operating systems. SAN architectures using Fibre Channel or iSCSI allow low-latency access to block storage, while NAS provides file-level access over standard network protocols. Proper configuration, multipathing, and zoning ensure reliability, performance, and fault tolerance across the hybrid datacenter, allowing consistent storage management and high availability for critical workloads.

File System Considerations

Different operating systems employ distinct file systems optimized for their respective workloads. Solaris leverages ZFS for data integrity, snapshots, and storage pooling. AIX utilizes JFS2, offering journaling capabilities and robust performance for transactional workloads.

Linux environments typically rely on XFS or ext4, providing flexibility, scalability, and compatibility with virtualization and cloud integration. Managing multiple file systems requires harmonized backup, replication, and monitoring strategies to maintain data consistency and ensure seamless operation in a heterogeneous environment.

Performance Tuning and Tiering Strategies

Performance tuning in hybrid datacenters involves optimizing I/O paths, balancing workloads, and configuring storage tiering. Administrators can employ tiered storage strategies that align high-performance workloads with SSD-based storage and archive workloads with lower-cost HDD storage. Caching mechanisms, RAID configurations, and I/O scheduler tuning help achieve optimal throughput and latency across Solaris, AIX, and Linux platforms. Regular benchmarking and monitoring ensure that performance remains consistent and predictable under variable workloads.

Backup, Replication, and Disaster Recovery

Hybrid datacenters must incorporate robust backup and replication strategies to mitigate data loss and ensure business continuity. Cross-platform backup solutions, snapshot technologies, and synchronous/asynchronous replication allow recovery of critical data in case of hardware failure or disaster events. Automation tools can schedule backups, monitor replication health, and validate data integrity across multiple operating systems. A well-designed disaster recovery plan ensures that hybrid datacenter operations remain resilient, secure, and compliant with enterprise policies and regulatory requirements.

V. NETWORKING AND CONNECTIVITY

Multi-OS Network Architecture

Hybrid datacenters integrating Solaris, AIX, and Linux require a network architecture that supports cross-platform communication, low latency, and high availability. Core networking components such as routers, switches, and firewalls must be configured to allow seamless traffic flow between different operating systems while maintaining isolation for security and compliance. Network segmentation and VLANs help separate workloads, optimize traffic, and prevent unauthorized access, ensuring consistent connectivity across the hybrid environment.

VLAN, Bonding, and Redundancy Practices

Virtual LANs (VLANs) enable logical segmentation of network traffic, reducing congestion and improving security by isolating specific workloads or applications. Network bonding or link aggregation provides redundancy and increased throughput, ensuring that critical workloads continue to operate even in the event of a network failure. Multi-path networking and failover configurations are particularly important in hybrid datacenters, where Solaris, AIX, and Linux systems may rely on shared storage and interdependent services.

Hybrid Network Security Considerations

Maintaining security in a hybrid multi-OS datacenter involves multiple layers of defense. Firewalls, access control lists, and secure routing protocols protect the network perimeter, while internal monitoring tools detect anomalies and potential breaches. Encryption of data in transit using TLS/SSL, IPsec, or VPN technologies ensures confidentiality between systems. Additionally, centralized identity management through LDAP or Active Directory provides authentication and role-based access across different operating systems, preventing unauthorized access and enhancing regulatory compliance.

Monitoring and Optimization

Effective network management in hybrid datacenters requires proactive monitoring and optimization. Tools such as network performance analyzers, SNMP-based monitoring, and flow analysis provide visibility into traffic patterns, bandwidth utilization, and potential bottlenecks. Network optimization strategies, including QoS (Quality of Service) policies, traffic shaping, and load balancing, ensure reliable and predictable performance across Solaris, AIX, and Linux systems. Regular audits and performance reviews help maintain a resilient and high-performing network infrastructure essential for hybrid datacenter operations.

VI. MONITORING AND PERFORMANCE MANAGEMENT

Cross-Platform Monitoring Tools

Monitoring hybrid datacenters with Solaris, AIX, and Linux requires tools capable of collecting metrics from multiple operating systems. Solutions such as Nagios, Zabbix, and Splunk provide centralized visibility into system health, resource utilization, and service availability. These platforms enable administrators to track CPU, memory, storage, and network performance across diverse environments, ensuring that issues can be detected and addressed before impacting critical workloads. Cross-platform compatibility is essential to unify monitoring and reduce administrative complexity.

Performance Benchmarking and Metrics

Regular benchmarking allows organizations to establish baseline performance metrics for each operating system and workload. Metrics such as CPU utilization, memory latency, I/O throughput, and network response times provide insight into system efficiency and potential bottlenecks. Solaris, AIX, and Linux each offer native performance analysis tools—such as Solaris DTrace, AIX nmon, and Linux perf—that can be integrated into centralized monitoring platforms. Benchmarking supports proactive capacity planning and ensures that hybrid datacenter resources are optimally utilized.

Proactive Resource Management

Performance management is not limited to monitoring; it also involves proactive resource allocation. Dynamic tuning of workloads, memory allocation, CPU scheduling, and storage I/O prioritization helps maintain predictable performance. Automation tools can trigger resource adjustments in real-time based on thresholds, reducing the risk of performance degradation.

Proactive management ensures high availability for mission-critical applications, minimizes latency, and supports scalable operations across Solaris, AIX, and Linux environments.

Predictive Analytics and Trend Analysis

Advanced monitoring incorporates predictive analytics to anticipate resource shortages or failures. Trend analysis, anomaly detection, and historical performance evaluation allow administrators to forecast capacity requirements, optimize workload placement, and plan maintenance schedules. By leveraging these insights, hybrid datacenters can operate more efficiently, maintain service-level agreements, and reduce unplanned downtime, enhancing overall reliability and resilience for enterprise operations.

VII. SECURITY AND COMPLIANCE

Identity Management Across Solaris, AIX, and Linux

Effective security in a hybrid datacenter requires centralized identity and access management across Solaris, AIX, and Linux systems. Solutions such as LDAP and Active Directory enable role-based access control (RBAC), ensuring that only authorized personnel can access critical resources. Integrating these services across multiple operating systems maintains consistent authentication, simplifies auditing, and strengthens overall security posture. Multi-factor authentication (MFA) further enhances protection against unauthorized access and credential compromise.

Patch Management and Vulnerability Mitigation

Regular patching and vulnerability management are critical to maintaining secure hybrid datacenters. Solaris, AIX, and Linux each have unique patching mechanisms and update schedules, necessitating coordinated procedures. Automation tools, such as Ansible or Puppet, can streamline patch deployment, minimize human error, and ensure compliance with organizational security policies. Regular vulnerability scans and assessments identify weaknesses before they can be exploited, protecting sensitive data and mission-critical workloads.

Regulatory Compliance and Auditing

Hybrid datacenters often host regulated workloads requiring adherence to standards such as HIPAA, GDPR, PCI DSS, or SOX. Security and compliance

frameworks must encompass cross-platform logging, auditing, and reporting mechanisms. Tools that collect system logs, user activity records, and change management data from Solaris, AIX, and Linux provide a unified view for compliance validation. Regular audits ensure that security policies are enforced consistently and that the datacenter meets regulatory obligations, mitigating legal and operational risks.

Threat Detection and Incident Response

Proactive threat detection and rapid incident response are essential for hybrid environments. Centralized security information and event management (SIEM) tools aggregate logs and alerts from multiple operating systems, enabling real-time monitoring and anomaly detection. Integration with automated response workflows allows security teams to remediate threats promptly, isolate compromised systems, and maintain business continuity. Combining prevention, detection, and response strategies ensures that Solaris, AIX, and Linux workloads remain secure and resilient against evolving cyber threats.

VIII. AUTOMATION AND ORCHESTRATION

Shell and Python Scripting for Multi-OS Tasks

Automation in hybrid datacenters is essential to reduce administrative overhead and ensure consistent operations across Solaris, AIX, and Linux. Shell scripting (Bash, KornShell) and Python are widely used to automate routine tasks such as system updates, user provisioning, and log analysis. Scripts can be scheduled via cron or integrated with orchestration frameworks to perform multi-step operations automatically. This approach minimizes human error, improves operational efficiency, and ensures consistent task execution across heterogeneous environments.

Configuration Management Tools

Configuration management tools like Puppet, Ansible, and Chef play a critical role in maintaining consistency across hybrid datacenters. These tools allow administrators to define infrastructure as code, enabling repeatable deployments, automated

configuration enforcement, and compliance validation. By managing system settings, package installations, and security policies centrally, organizations can maintain a uniform environment across Solaris, AIX, and Linux servers, reducing configuration drift and enhancing operational reliability.

Orchestration of Workloads Across Hybrid Datacenters

Orchestration involves coordinating and automating workflows that span multiple operating systems, applications, and virtualized environments. Platforms such as Red Hat Satellite, Ansible Tower, or custom orchestration frameworks can deploy workloads, manage dependencies, and schedule tasks across Solaris, AIX, and Linux servers. By automating workload orchestration, enterprises can achieve faster deployment cycles, optimal resource utilization, and reduced operational complexity while ensuring consistent performance and availability.

Benefits of Automation and Orchestration

Integrating automation and orchestration into hybrid datacenter operations provides tangible benefits, including reduced downtime, improved compliance, and faster response to changing business requirements. It enables proactive maintenance, dynamic resource scaling, and consistent security enforcement. Additionally, automation facilitates disaster recovery testing and replication workflows, ensuring resiliency in the event of system failures. By adopting these strategies, enterprises can manage complex, multi-OS environments efficiently and cost-effectively, supporting scalable and resilient hybrid datacenter operations.

IX. CASE STUDIES AND INDUSTRY IMPLEMENTATIONS

Financial Sector Multi-OS Deployments

Financial institutions often rely on hybrid datacenters to run mission-critical applications securely and efficiently. One global bank implemented Solaris for high-availability trading platforms, AIX for core banking systems, and Linux

for cloud-native analytics workloads. By leveraging virtualization and orchestration tools, the bank achieved optimal resource utilization and seamless interoperability between operating systems. Centralized monitoring and automated patching ensured consistent performance and compliance with stringent regulatory requirements such as PCI DSS.

Healthcare Datacenters with Solaris, AIX, and Linux

Healthcare providers face strict HIPAA compliance requirements while managing heterogeneous workloads. A large hospital network utilized Solaris for legacy patient management applications, AIX for laboratory information systems, and Linux for analytics and reporting platforms. Cross-platform integration through LDAP and centralized storage solutions allowed secure access to patient data while maintaining high availability. Automation frameworks streamlined repetitive administrative tasks, reducing operational overhead and ensuring consistent security enforcement.

Lessons Learned and Best Practices

Case studies reveal that successful hybrid datacenter management relies on strategic planning, robust automation, and cross-platform monitoring. Key lessons include the importance of standardizing network and storage protocols, implementing centralized identity management, and leveraging configuration management tools to reduce human error. Workload placement must consider performance requirements, redundancy, and disaster recovery capabilities. These best practices enable enterprises to achieve resilient, scalable, and secure hybrid operations while optimizing resource utilization.

Industry Insights

Enterprises that adopt a multi-OS approach benefit from increased flexibility and operational efficiency but must also address complexity through automation, orchestration, and monitoring. Integration of legacy systems with modern Linux environments and cloud-based services enhances agility and supports digital transformation initiatives. Hybrid datacenters can maintain

compliance, reduce costs, and improve performance when guided by standardized processes, predictive analytics, and proactive resource management.

X. EMERGING TRENDS AND FUTURE DIRECTIONS

Cloud Integration and Hybrid Expansion

Hybrid datacenters are increasingly extending operations to public and private clouds, integrating Solaris, AIX, and Linux workloads with cloud-native platforms. Cloud integration provides elastic scalability, disaster recovery capabilities, and access to advanced analytics and AI services. Enterprises are adopting hybrid cloud models to maintain legacy system reliability while leveraging the agility and cost-efficiency of cloud environments, ensuring seamless interoperability across on-premises and cloud resources.

AI-Driven Resource Optimization

Artificial intelligence and machine learning are transforming hybrid datacenter management. Predictive analytics optimize resource allocation, identify performance bottlenecks, and forecast capacity requirements across Solaris, AIX, and Linux systems. AI-driven automation also enables proactive anomaly detection, predictive maintenance, and adaptive workload placement, reducing downtime and improving operational efficiency in multi-OS environments.

Containerization and Microservices Adoption

Containerization platforms such as Docker and orchestration frameworks like Kubernetes are increasingly deployed on Linux nodes within hybrid datacenters. Containers enable lightweight, portable applications and microservices architectures, which can coexist with traditional Solaris and AIX workloads. This approach allows enterprises to modernize applications gradually while maintaining compatibility with legacy systems, enhancing agility and scalability.

Future Outlook for Multi-OS Datacenter Management

The future of hybrid datacenter management emphasizes automation, interoperability, and intelligent orchestration. Enterprises will continue adopting AI-driven monitoring, integrated identity management, and cross-platform orchestration to reduce complexity and optimize performance. Emerging technologies, including edge computing, advanced storage tiering, and enhanced virtualization capabilities, will further improve resource utilization and resilience. Strategic planning and adoption of best practices will ensure hybrid datacenters remain secure, efficient, and adaptable to evolving business and technological demands.

XI. CONCLUSION

Managing Solaris, AIX, and Linux within hybrid datacenters requires a strategic approach that balances legacy system stability with modern operational agility. This review highlights that multi-OS environments can achieve high performance, scalability, and resilience when workloads are optimized, integrated, and monitored effectively. Virtualization, centralized storage, and cross-platform networking are foundational elements that enable seamless operations, while automation and orchestration reduce administrative complexity and improve consistency. Enterprises should adopt standardized processes for resource allocation, patch management, and security enforcement across all operating systems. Integrating configuration management tools and centralized identity services ensures uniformity, reduces errors, and enhances compliance. Strategic workload placement and performance monitoring are critical for maintaining predictable service levels, while automation allows proactive management of both routine and complex tasks. These practices collectively support operational efficiency and business continuity. The future of hybrid datacenters lies in leveraging emerging trends such as cloud integration, AI-driven resource optimization, containerization, and predictive analytics. Enterprises that combine these technologies with established best practices will benefit from greater agility, reduced downtime, and cost-effective scalability. By continuously evolving infrastructure and operational strategies, organizations can ensure hybrid datacenters remain resilient, secure, and capable of supporting both legacy and modern workloads. In conclusion, a well-managed hybrid datacenter uniting Solaris, AIX, and Linux offers significant advantages in flexibility, performance, and operational resilience. By adopting cross-platform integration strategies, robust monitoring, automation, and forward-looking technologies, enterprises can achieve a sustainable, high-performing infrastructure. This approach not only optimizes current operations but also positions organizations for successful adaptation to future technological advancements and evolving business requirements.

REFERENCE

1. Munodawafa, F. (2016). Emerging Security Risks within Hybrid Datacenter Infrastructure : A Risk Assesment.

2. Maddineni, S. K. (2018). A practical guide to document transformation techniques in Workday for non-standard vendor layouts. International Journal of Trend in Research and Development, 5(5).

3. Maddineni, S. K. (2018). Automated change detection and resolution in payroll integrations using Workday Studio. International Journal of Trend in Research and Development, 5(2), 778–780.

4. Battula, V. (2018). Securing and automating Red Hat, Solaris, and AIX: Provisioning-to-performance frameworks with LDAP/AD integration. International Journal of Current Science (IJCSPUB), 8(1).

5. Kota, A. K. (2018). Dimensional modeling reimagined: Enhancing performance and security with section access in enterprise BI environments. International Journal of Science, Engineering and Technology, 6(2).

6. Kota, A. K. (2018). Unifying MDM and data warehousing: Governance-driven architectures for trustworthy analytics across BI platforms. International Journal of Creative Research Thoughts (IJCRT).

7. Madamanchi, S. R. (2018). Intelligent enterprise server operations: Leveraging Python, Perl, and

shell automation across Sun Fire, HP Integrity, and IBM pSeries platforms. International Journal of Trend in Research and Development, 5(6).

8. Munodawafa, F. (2016). Emerging Security Risks within Hybrid Datacenter Infrastructure : A Risk Assesment.

9. Maddineni, S. K. (2018). Governance driven payroll transformation by embedding PECI and PI into resilient Workday delivery frameworks. International Journal of Scientific Development and Research (IJSDR), 3(9).

10. Maddineni, S. K. (2018). Multi-format file handling in Workday: Strategies to manage CSV, XML, JSON, and EDI-based integrations. International Journal of Science, Engineering and Technology, 6(2).

11. Mulpuri, R. (2018). Federated Salesforce ecosystems across poly cloud CRM architectures: Enabling enterprise agility, scalability, and seamless digital transformation. International Journal of Scientific Development and Research (IJSDR), 3(6).

12. Peng, B., Yao, J., Qi, Z., & Guan, H. (2018). HybridPass: Hybrid Scheduling for Mixed Flows in Datacenter Networks. 2018 IEEE International Parallel and Distributed Processing Symposium (IPDPS), 1000-1009.

13. Luo, X., Shi, C., Chen, X., Wang, L., & Yang, T. (2018). Global Optimization of All-Optical Hybrid-Casting in Inter-Datacenter Elastic Optical Networks. IEEE Access, 6, 36530-36543.

14. Maddineni, S. K. (2018). Post-production defect resolution in Workday projects: Insights from global implementation support. International Journal of Science, Engineering and Technology, 6(2).

15. Maddineni, S. K. (2018). XSLT and document transformation in Workday integrations: Patterns for accurate outbound data transmission. International Journal of Science, Engineering and Technology, 6(2).

16. Pilimon, A., & Ruepp, S. (2018). A Hybrid Testbed for Performance Evaluation of Large-Scale Datacenter Networks. 2018 International Conference on Computing, Networking and Communications (ICNC), 409-413. Mehenni, A., Alimazighi, Z., Bouktir, T., & Ahmed-Nacer, M. (2018). An optimal big data processing for smart grid based on hybrid MDM/R architecture to strengthening RE integration and EE in datacenter. Journal of Ambient Intelligence and Humanized Computing, 10, 3709 - 3722.

17. Li, Z., & Shen, H. (2017). Job scheduling for data-parallel frameworks with hybrid electrical/optical datacenter networks. Proceedings of the 2017 Symposium on Cloud Computing.

18. Boeuf, F., Han, J., Takagi, S., & Takenaka, M. (2017). Benchmarking Si, SiGe, and III–V/Si Hybrid SIS Optical Modulators for Datacenter Applications. Journal of Lightwave Technology, 35, 4047-4055.

19. Li, X., Wu, Y., Liu, X., Cheng, H., Zhu, E., & Yang, Y. (2016). A novel datacenter-oriented data placement strategy of scientific workflow in hybrid cloud.

20. Christodoulopoulos, K., Kontodimas, K., Siokis, A., Yiannopoulos, K., & Varvarigos, E. (2016). Collisions free scheduling in the NEPHELE hybrid electrical/optical datacenter interconnect. 2016 IEEE International Conference on Electronics, Circuits and Systems (ICECS), 368-371.

21. Zhou, Y., Alagappan, R., Memaripour, A., Badam, A., & Wentzlaff, D. (2017). Hybrid NVM Enabled Datacenter Design and Optimization.