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Mastering IT Asset Intelligence: A Comparative Analysis of Configuration Management in ServiceNow and BMC Helix

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Abstract: *This research paper presents an in-depth comparison of the Configuration Management applications offered by ServiceNow and BMC Helix. The study examines key features, discovery capabilities, relationship mapping, integration with other ITSM processes, and reporting tools of both solutions. By evaluating their strengths and weaknesses in managing configuration items (CIs) and maintaining the Configuration Management Database (CMDB), this paper aims to provide insights for organizations seeking to enhance their IT asset intelligence and service delivery capabilities.*

I. INTRODUCTION

In today's complex IT environments, effective Configuration Management is crucial for maintaining accurate visibility of IT assets, their relationships, and their impact on business services. ServiceNow and BMC Helix, two leading ITSM platforms, offer sophisticated Configuration Management applications designed to help organizations build and maintain a comprehensive CMDB. This paper aims to provide a detailed comparison of the Configuration Management capabilities offered by ServiceNow and BMC Helix. We will explore how each platform addresses key aspects of configuration management, from discovery and mapping to data quality management and integration with other ITSM processes. By examining these aspects, we seek to offer valuable insights for IT leaders and decision-makers evaluating these solutions for their organizations.

II. BACKGROUND

A. ServiceNow Configuration Management

ServiceNow's Configuration Management application is a core component of its ITSM suite, built on the Now Platform. It offers a comprehensive set of tools for discovering, mapping, and managing configuration items across the IT infrastructure.

B. BMC Helix Configuration Management

BMC Helix Configuration Management, part of the BMC Helix ITSM suite, provides an AI-driven approach to maintaining the CMDB. It leverages cognitive automation and machine learning to enhance discovery, mapping, and data quality management.

III. COMPARISON

A. Discovery and Data Collection

1) ServiceNow

- a) Agentless and agent-based discovery options
- b) Multi-cloud discovery capabilities
- c) Network topology mapping
- d) Integration with third-party data sources

2) BMC Helix

- a) AI-driven discovery and data collection
- b) Autonomous discovery for dynamic environments
- c) Application dependency mapping
- d) Cognitive interpretation of discovered data

B. CMDB Structure and Data Model

1) *ServiceNow*

- a) Flexible, extensible data model
- b) Pre-built CI classes and relationships
- c) Visual data model designer
- d) Support for federated CMDBs

2) *BMC Helix*

- a) AI-assisted data model optimization
- b) Dynamic CI classification
- c) Automated relationship mapping
- d) Multi-tenant CMDB architecture

C. Data Quality Management

1) *ServiceNow*

- a) Built-in data quality dashboards
- b) Automated data reconciliation
- c) Duplicate detection and merge
- d) CI lifecycle management

2) *BMC Helix*

- a) AI-powered data quality scoring
- b) Cognitive anomaly detection
- c) Automated data enrichment
- d) Predictive data decay prevention

D. Visualization and Relationship Mapping

1) *ServiceNow*

- a) Interactive service maps
- b) Impact simulation tools
- c) Dependency viewer
- d) Custom map creation capabilities

2) *BMC Helix*

- a) AI-generated relationship maps
- b) Real-time topology visualization
- c) Business service modeling
- d) Cognitive impact analysis

E. Integration with Other ITSM Processes

1) *ServiceNow*

- a) Seamless integration with Incident, Problem, and Change Management
- b) Asset Management integration for financial tracking
- c) Service Catalog integration for request fulfillment
- d) Event Management correlation with CIs

2) *BMC Helix*

- a) Unified platform for all ITSM processes
- b) Integration with BMC Helix Digital Workplace for end-user context
- c) Connection to BMC Helix Operations Management for AIOps
- d) Integration with BMC Helix Continuous Optimization for capacity planning

F. Reporting and Analytics

1) *ServiceNow*

- a) Pre-built CMDB health dashboards
- b) Custom report creation with graphical interface
- c) CI lifecycle analytics
- d) Compliance and audit reporting

2) *BMC Helix*

- a) AI-driven insights on CMDB health and utilization
- b) Predictive analytics for infrastructure planning
- c) Real-time KPI tracking and alerts
- d) Integration with BMC Helix Analytics for advanced data visualization

IV. AUTOMATION AND AI CAPABILITIES

A. *ServiceNow*

- a) Automated CI updates based on changes
- b) Machine learning for data classification
- c) Predictive impact analysis
- d) Natural language queries for CMDB data

B. *BMC Helix*

- a) Cognitive automation for CMDB maintenance
- b) AI-driven service impact prediction
- c) Automated root cause analysis using CMDB data
- d) Natural language processing for configuration queries

V. STRENGTHS AND LIMITATIONS

A. *ServiceNow*

1) *Strengths*

- a) Highly scalable and customizable CMDB
- b) Strong integration across ITSM processes
- c) Comprehensive discovery capabilities

2) *Limitations*

- a) Can be complex to implement and maintain
- b) May require significant resources for large-scale deployments

B. *BMC Helix*

1) *Strengths*

- a) Advanced AI and cognitive automation features
- b) Strong focus on data quality and automated maintenance
- c) Flexible deployment options (cloud, on-premises, hybrid)

2) *Limitations*

- a) May require investment in broader BMC ecosystem for full benefit
- b) Transition from legacy BMC Atrium CMDB can be challenging

VI. CONCLUSION

Both ServiceNow and BMC Helix offer robust Configuration Management solutions with advanced features to support comprehensive IT asset intelligence.



ServiceNow's strength lies in its highly scalable and customizable CMDB, strong integration across ITSM processes, and comprehensive discovery capabilities, making it suitable for organizations with complex IT environments and mature ITSM practices. BMC Helix excels in its AI-driven approach, strong focus on data quality, and cognitive automation capabilities, appealing to organizations prioritizing automated maintenance and predictive analytics in their configuration management processes.

The choice between these platforms will depend on factors such as existing IT infrastructure, specific configuration management requirements, the maturity of ITSM processes, and long-term IT strategy. Organizations should carefully evaluate their needs, conduct proof-of-concept trials, and consider the total cost of ownership when deciding between ServiceNow and BMC Helix for Configuration Management.

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