

IT Portfolio Discovery:
**Greater Complexity
Demands a
Modern Solution**



IT teams face more data and greater complexity

Today's IT environments have never been more complicated. With the continued growth of public cloud and container technology and the increased use of microservices-based application delivery, IT has a daunting task of understanding what's out there and how IT assets support the business. What's needed is an asset discovery and dependency modeling solution that offers visibility across the data center, cloud, and container technology and is dynamic enough to keep up with the rapid infrastructure changes caused by modern development practices.

Wanted: An end-to-end view of hybrid, multi-cloud IT environments and clear visibility into business services performance.

○ “Organizations with mature ITSM capabilities often need tools that provide better visibility of the I&O organization, with as few vendor tools as possible to reduce ITOM debt and complexity.”

– **Gartner¹**

○ “In the first six months of 2020, 80% of attacks used vulnerabilities that were at least two years old.”

– **Check Point Research²**

○ “More than 90% of global enterprises will rely on the hybrid cloud by 2022.”

– **IDC³**

The risks—and stakes—are getting higher

When IT teams lack a complete, dynamically updated service view, they face data center disruptions, security and compliance risks, service bottlenecks, overspending on unneeded assets, and more. Common challenges include:

- + **Meeting compliance and regulatory standards:** An increasingly complex global regulatory landscape makes compliance and passing related audits difficult without a complete understanding of the infrastructure and its application dependencies.
- + **Growing security threats and vulnerabilities:** Blind spots, non-compliant software, and unsecure configurations present vulnerabilities that create backdoor entry points for intrusion.
- + **Managing complex cloud migration projects:** Without the ability to identify dependencies and fully understand the implications of application migration and visibility into container environments, migrating to cloud-based infrastructures can take longer and cost more.
- + **Keeping up with an accelerated pace of change:** Constantly changing configurations and complex application and network information requires dynamic asset discovery and dependency modeling that traditional discovery tools can't handle.

“There are known knowns. There are things we know we know. We also know there are known unknowns. That is to say, we know there are some things we do not know. But there are also unknown unknowns, the ones we don't know we don't know.”

- U.S. Secretary of Defense Donald Rumsfeld,
February 12, 2002

Transformation starts with full visibility

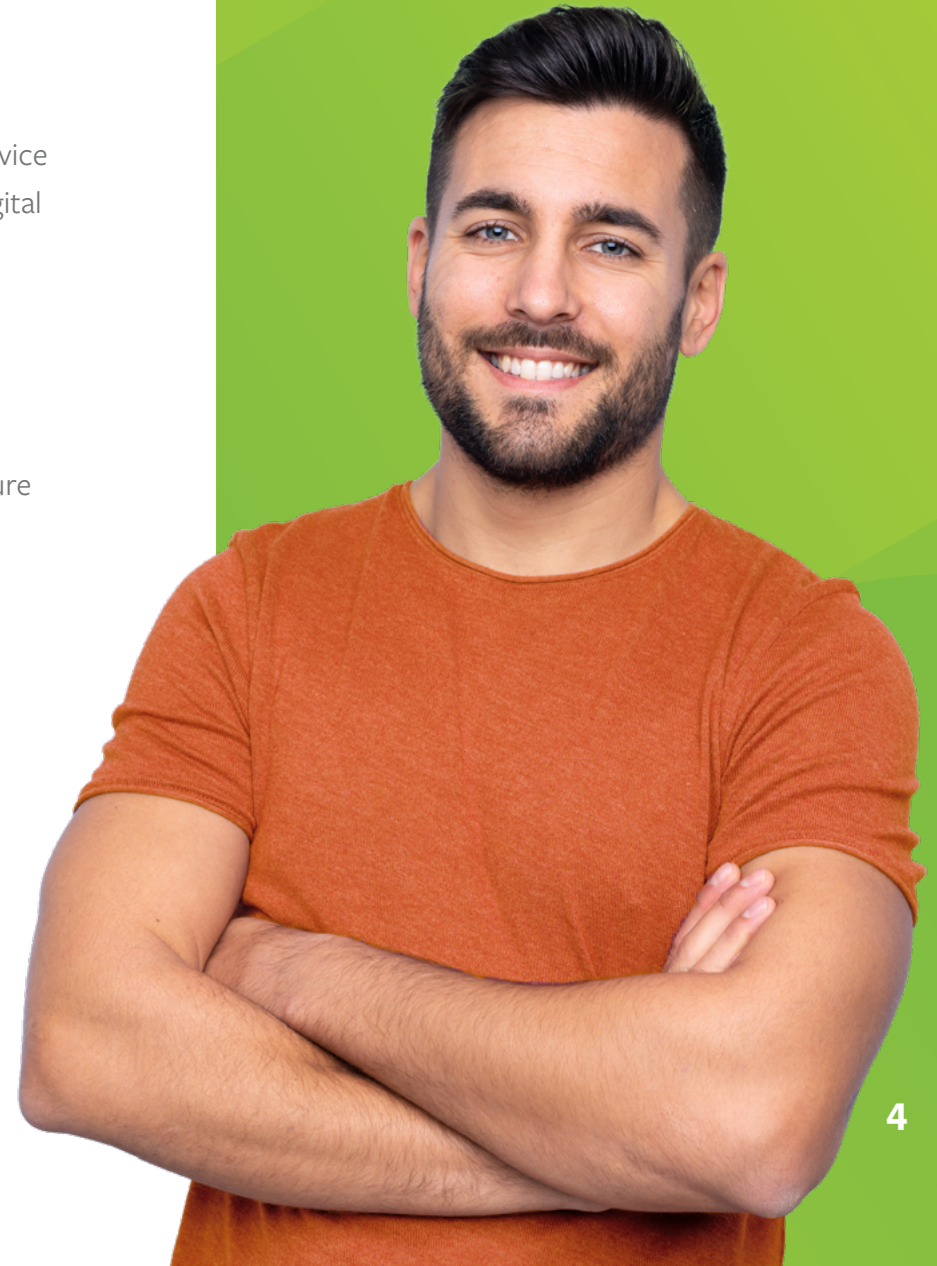
As enterprises implement digital transformation strategies, operations management teams need instant visibility into hardware, software, and service dependencies across multi-cloud environments. Without such visibility, digital transformation initiatives like cloud migration can flounder.

This requires a modern approach to discovery—one that can handle the complexity across a spectrum of configurations including mainframe, traditional and hyper-converged infrastructures, container management, and cloud services. This solution should be able to identify the infrastructure requirements that should move to the cloud, which will help to streamline migration and enhance data accuracy. It also should reduce the costly and time-consuming manual effort to collect, collate, and maintain inventory. Overall, a modern discovery tool should offer four critical benefits:

- **UP-TO-DATE SERVICE AWARENESS**
- **LOWER COSTS**
- **REDUCED RISK**
- **INCREASED PRODUCTIVITY**



You can't manage what you can't see.



Common Challenges



Cloud migration

- Difficult to understand dependencies
- Unable to determine which applications can migrate
- Lack of visibility into containers



Security

- Unable to track latest software versions, patches, hardware
- Difficult to identify backdoor entry points for intrusion



Compliance

- Difficult to execute audits
- Susceptible to fines
- High risk of exposing customer information



Increased complexity

- Modern development practices causing rapid infrastructure changes
- Difficult for IT to understand and model business services

Up-to-date service awareness

Certainly, the number-one criterion in choosing a discovery solution is that it is fully up to the task at hand. It should offer rapid discovery, relationship modeling, and visualization of the entire hardware and software landscape to provide accurate asset and relationship views from any point in a complex IT infrastructure at any time. Specific capabilities to look for include:



Fast, accurate, agentless discovery: Automatically obtain visibility into hardware, software, and service dependencies with support for multi-cloud, hybrid, and on-premises environments.



Dynamic service modeling: Generate detailed datasets and topologies and leverage AIOps to perform anomaly detection, root cause analysis, cost optimization, and service management.



Continuous content updates: Draw from an up-to-date library of asset data across software versions, network devices, storage brands, relationship types, middleware, cloud services, and DevOps technologies.

A traditional top-down approach fails to uncover complexity. Reduce time and effort with dynamic service models.

BMC Helix Discovery provides: ⁴

> **13%**
improved help desk operations

> **57%**
reduction in unplanned downtime

> **19%**
reduced staff hours required to perform software audits

Reduced costs

A primary goal of IT asset discovery is to see where your organization is spending its IT dollars in order to manage costs by aligning IT resources with business service demands, optimizing cloud resources, and eliminating wasted spend and budget over-runs. Your asset discovery solution should provide dynamically generated reports that enable IT teams to continually evaluate the use of assets so businesses can right-size infrastructure and get the most out of their IT budget.

A U.S state government health department used a BMC multi-product solution including BMC Helix Discovery, experiencing a **\$19.2M savings over 3 years.**

A modern IT asset discovery solution should pay for itself in savings around right-sizing infrastructure, uncovering unsupported assets and applications, and other sources of resource waste. BMC Helix Discovery offers: ⁵



549% 5-year ROI



5.4 months to payback



Lower risk

With increased complexity comes increased risk. Complete visibility into the IT infrastructure helps teams identify software that contains misconfigurations and vulnerabilities, which results in quicker remediation, reduced downtime, and improved security and compliance. A modern IT asset discovery solution should:

- + Identify servers that could be backdoor entry points.
- + Detect assets that are potential blind spots, locate backdoor entry points, and identify vulnerabilities.
- + Provide a clear change impact assessment.
- + Offer complete audit assessment.

It takes an average of **84 days** to remediate high-risk vulnerabilities.⁶

A modern IT asset discovery solution should reduce the risk of unplanned downtime and data breaches. BMC Helix Discovery offers: ⁷

> **8%**

reduction in number of physical servers required

> **57%**

reduction in unplanned downtime

> **42%**

more efficient auditing teams

> **~\$360K**

Reduction of risk mitigation

Increased productivity

Whatever IT asset discovery solution you choose should reduce manual effort that decreases productivity and increases the risk of error and rework, resulting in service disruptions, security and compliance risks, and higher spending. Look for these capabilities when you're assessing asset discovery tools:

Automatic asset discovery and dependency modeling to enable IT teams to become more efficient and productive for service management, data center management, and software auditing.

Agentless technology that automatically obtains visibility into hardware, software, and service dependencies across multi-cloud, hybrid, and on-premises environments.

Start Anywhere Application Modeling, which facilitates the discovery of assets from top down, bottom up, or middle out, providing your team with an application map from any starting point.

Discovery-as-code with frameworks and REST APIs to integrate into your CI/CD pipelines.

- 86% of firms say **one hour of downtime costs \$300,000+**
- 34% of companies say **one hour of downtime tops \$1 million**⁸

A modern IT asset discovery solution should increase productivity through automation and integration with other operations management tools. BMC Helix Discovery provides: ⁹

\$4M+

in productivity gains and cost reduction

15%

more efficient IT infrastructure team

What to look for in an asset discovery and dependency modeling solution



FAST, ACCURATE, AGENTLESS DISCOVERY:

Automatically obtain visibility into hardware, software, and service dependencies across multi-cloud, hybrid, and on-premises environments.



SECURITY AND COMPLIANCE:

Detect blind spots, locate backdoor entry points, and identify vulnerabilities.



CONTINUOUS CONTENT UPDATES:

Leverage thousands of asset types, with support for containers and cloud infrastructure.



DYNAMIC SERVICE MODELING:

Generate detailed, near real-time datasets and topologies that enable IT teams to fully leverage AIOps and machine learning to perform anomaly detection, root cause analysis, cost optimization, and service management.



START ANYWHERE APPLICATION MODELING:

Discover assets and create application models from any starting point in the IT infrastructure within minutes.



DISCOVERY-AS-CODE:

Leverage frameworks and REST APIs to integrate into your CI/CD pipelines.

Start your organization's digital transformation on a solid foundation with the end-to-end visibility you need to make it a success.

Real-life business value

Analysis by IDC shows that the benefits of BMC Helix Discovery translate into a business value averaging **\$4.18 million** per year per organization: ¹⁰

- + **IT staff productivity:**
\$2,877,000
- + **IT infrastructure cost reduction:**
\$813,000
- + **Risk mitigation:**
\$363,000
- + **Business productivity:**
\$126,000



BMC Helix Discovery

BMC Helix Discovery is a SaaS-based, agentless, cloud-native discovery and dependency mapping solution that provides instant visibility into hardware, software, and service dependencies across multi-cloud environments. Its discovery capabilities handle the complexity of managing a wide spectrum of configurations including mainframe, traditional and hyper-converged infrastructures, container management, and cloud services.

BMC Helix Discovery acts as the primary data source for capacity planning, operations management, security, compliance, and service management. Its ability to establish how elements connect and their dependencies provides IT operations teams with a complete, context-based inventory from any point in the infrastructure.

BMC Helix Discovery provides a complete, enriched data set through its creation of dynamic service models. This enables operations teams to fully leverage AIOps, advanced analytics, and machine learning capabilities that assist with anomaly detection, root cause analysis, cost optimization, and service management.

CASE STUDY

Telco¹¹

A global telco uses BMC Helix to provide visibility and reduce MTTR. BMC Helix allowed the telco to:

- Pinpoint issues immediately
- Perform root cause analysis
- Measure real-time service level agreements
- Evaluate the business impact

“If we don’t know our assets, we’re vulnerable. We’ve invested significantly in BMC Helix Discovery to cover the entire environment. We need to understand everything from what’s there to what its patch level is.”

-Telco strategic project manager

What makes BMC Helix Discovery different

- **BMC HELIX PLATFORM:**
BMC Helix Discovery augments the BMC Helix Platform for cross-domain (service and operations) visibility.
- **START ANYWHERE APPLICATION MODELING:**
Discover assets and create application models from any starting point in the IT infrastructure within minutes.
- **ENABLE BLIND SPOT DETECTION:**
Critical for meeting regulatory, security, and compliance requirements.
- **DYNAMIC SERVICE MODELS:**
Provides up-to-date, service-level information for AIOps and AISM.
- **AUGMENTED DISCOVERY:**
Ingest data from third-party tools, such as network performance management/application performance management tools, to augment BMC's native discovery capabilities, leading to richer, more dynamic service models.
- **SINGLE VENDOR:**
Get a comprehensive, holistic view of on-premises, hybrid, and multi-cloud infrastructures with containers and microservices.

Industry-leading asset library

Leverage a robust library containing more than 15 years of asset data, including support for data center, public cloud, and container technology.

40,000+

software versions

1,000's

of relationship types

6,000+

network devices

100+

middleware technologies

30+

storage brands

25+

DevOps technologies



About BMC

BMC delivers software, services, and expertise to help more than 10,000 customers, including 92% of the Forbes Global 100, meet escalating digital demand and maximize IT innovation. From mainframe to mobile to multi-cloud and beyond, our solutions empower enterprises of every size and industry to run and reinvent their businesses with efficiency, security, and momentum for the future.

Run and Reinvent

www.bmc.com

SOURCES

- ¹ Gartner, "Critical Capabilities for IT Service Management Tools," September 2019
- ² Check Point Research, Cyber Attack Trends: 2020 Mid-Year Report, 2020
- ³ IDC Expects 2021 to Be the Year of Multi-Cloud as Global COVID-19 Pandemic Reaffirms Critical Need for Business Agility
- ^{4, 5, 7, 9, 10} Shannon Kalvar and Harsh Singh, BMC Helix Discovery Helps Organizations Optimize ITSM Operations and Asset Management, IDC, 2019
- ⁶ 2021 Vulnerability Statistic Report Press Release - Edgescan
- ⁸ Information Technology Intelligence Consulting, May 2019
- ¹¹ Forrester, The Total Economic Impact of BMC Helix, Forrester, January 2021, updated March 4, 2021



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EBook

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ABOUT RIGHTSTAR SYSTEMS

RightStar Systems is a leading provider of DevOps and ITSM management solutions for government agencies and commercial organizations. As an Elite BMC Software Solution Partner and previous BMC Supplier of the Year, RightStar provides consulting, design, and implementation services for the full BMC product lines. As a complement to these services, RightStar offers on-site ITIL®/DevOps assessments providing strategic roadmaps for delivering services to the business more efficiently, accredited ITIL® certification training, and a comprehensive line of RightStar software products that add essential functionality to your IT service management and DevOps systems.