

Triton Consulting

WebSphere Health Check

WebSphere Health Check

As IBM continues to enhance the features and capabilities of WebSphere in each new release, many clients are finding it increasingly difficult to remain up to date with best practice and ensure they are fully exploiting the many benefits that WebSphere can offer. Ever-growing hardware and software costs continue to demand a focus on minimising resource consumption: a task that becomes more difficult as application complexity and heterogeneity increase.

Triton's Health Check aims to address these challenges by providing a comprehensive, structured review of the client's WebSphere environment. Ideally, the Health Check process will be repeated on a regular basis in order to quickly identify any new issues and ensure that a client's environment follows best practice and is running efficiently.

This document defines the standard Terms Of Reference for the Triton WebSphere Health Check. It is anticipated that these will be amended as necessary to address the exact requirements of specific client situations. However, the main tasks will remain constant.

Objectives

The objective of the WebSphere Health Check is to identify those areas of the client's environment where WebSphere usage does not correspond to industry best practice, and deliver a detailed set of recommendations for addressing those issues.

The aim of the review is to ensure that the environment is stable, performing optimally, and aligned with IBM best practices. The review covers the following key areas:

Scope

- **Platform and Server Capacity** – A review of the underlying AIX operating system and server infrastructure is carried out to confirm that adequate CPU, memory, and storage resources are available to support current and future workload demands. Recommendations are made where capacity constraints or potential scalability issues are identified.
- **WebSphere Software Level** – The version of WebSphere Application Server and its associated Fix Packs are reviewed to confirm the environment is fully supported and maintained. The installed Java SDK level is also verified to ensure compatibility and to identify any required maintenance or security updates.
- **Cell, Node and Server Configuration** – Each component within the cell (Deployment Manager, Node Agents, and Application Servers) are reviewed for configuration consistency and synchronization status. This includes verification of node synchronization, server startup settings, class loader policies, and custom service configurations. Recommendations are provided to align the configuration with IBM standards and operational best practices.
- **JVM and Resource Configuration** – A review is conducted of JVM heap sizes, garbage collection policy, and key performance-related settings such as thread pools and JDBC connection pools. The configuration is assessed to confirm that it is appropriate for the application workload and that resource usage is well balanced across servers.
- **Operating System Health (AIX)** – System-level checks are performed to assess CPU utilisation, memory usage, disk I/O, and network connectivity. Filesystem capacity, ulimit settings, and other OS-level parameters are reviewed to confirm that the environment provides a stable and performant foundation for WebSphere operations.
- **Logging and Error Management** – SystemOut, SystemErr, and FFDC (First Failure Data Capture) logs are reviewed to identify recurring warnings, errors, or stability issues. Log rotation policies and retention settings are checked to ensure that diagnostic data is managed efficiently while retaining sufficient detail for troubleshooting.
- **Application Runtime Health** – The runtime health of each application server is evaluated, including start-up success, synchronization status, and availability of deployed applications. Performance Monitoring Infrastructure (PMI) metrics are reviewed to confirm acceptable response times, resource utilization, and application responsiveness.

Scope (continued)

- **Security and SSL Configuration** – Security settings are reviewed, including SSL keystores and truststores, to confirm that all certificates are valid and not due to expire. Authentication and Single Sign-On (SSO) configurations are examined where applicable to ensure secure and reliable user access
- **Backup and Recovery** – Current backup and recovery procedures for WebSphere profiles, configurations, and logs are reviewed. Recommendations are provided to ensure that recovery from system or configuration failure can be achieved quickly and reliably.
- **Maintenance and Lifecycle Management** – The review ensures that regular maintenance practices are in place, including patching schedules, configuration backups, and monitoring of IBM security advisories. Recommendations are made for improving operational governance, including automating recurring health checks and integrating proactive monitoring.
- **Reporting and Recommendations** – At the conclusion of the health check, a summary report is produced outlining current system health, key findings, and prioritised recommendations. Each finding is categorised by severity and impact, with clear actions to improve performance, stability, and maintainability of the WebSphere environment.

Deliverables

The deliverable from this study will be the WebSphere Health Check Report. This will use the structure shown below:

Introduction

-
- Management Summary**
- A concise summary of any assumptions made during the study.

-
- Assumptions**
- A detailed list of any issues noted during the health check, with their potential impact on system performance or availability.

-
- Issues**
- A series of recommendations to address the issues previously identified.

Recommendations

Conclusions

Our clients

Resilience in Every Layer, Security in Every Transaction

At Triton Consulting, we partner with organisations that view downtime as a non-starter and security as a foundation. Our clients operate high-traffic, mission-critical environments where WebSphere Application Server and the underlying database (for example, Db2) are the heartbeat of their digital infrastructure. From global financial institutions to national retail chains, our clients share a common need: a technology stack that is not only robust and highly available but also fully compliant with the world's most stringent regulatory standards.

What You Can Expect

When you partner with Triton for a comprehensive Health Check, you receive more than just a report; you gain a roadmap to operational excellence.

We dive deep into your clustered environments to ensure every component is optimised.

- **End-to-End Optimisation** – We audit the entire stack from the bottom up, from OS-level tuning to database connectivity to the WebSphere container and beyond.
- **Regulatory Rigour** – We bridge the gap between IT and audit. Our health checks ensure your environment remains compliant with online regulatory frameworks such as PCI DSS, identifying and remediating vulnerabilities before they become liabilities and ensuring the latest cryptography protocols are in place at every layer.
- **Best-Practice Architecture** – We verify that your high-availability and fault-tolerance configurations are truly resilient, ensuring that your clusters are balanced and capable of seamless failover.

How You Benefit

- **Eliminate Blind Spots** – Gain absolute visibility into hidden configuration drifts across your technology stack.
- **Minimised Risk** – Rest easy knowing your customer data is handled within a PCI-compliant environment, reducing the risk of breaches and heavy fines.
- **Peak Performance** – By aligning your stack (from the load balancer to the database) with industry best practices, you ensure lower latency and higher throughput for your end users.
- **Maximised Uptime** – We validate your fault-tolerance settings so that “High Availability” is a reality, not just a configuration setting.

Triton Consulting doesn't just check boxes; we provide the technical assurance that your most complex systems are ready for peak demand while keeping your compliance status beyond reproach.

About Triton

Triton Consulting are experts in Hybrid Data Management and Digital Transformation.

Our consulting team includes some of the most highly experienced and qualified specialists in the industry, with deep expertise in Db2 for LUW and WebSphere environments. We provide tailored advice and optimisation services to help organisations get the most from their critical data and application platforms.

As well as our specialist WebSphere consultancy, Triton also offers a full range of high-level technical services including performance tuning, technical planning, architecture, systems programming and senior project management. Our dedicated WebSphere Health Check services give organisations clear, actionable insight into system performance, stability and future readiness.

Triton Consulting has been delivering consultancy services for years and is internationally recognised for its expertise, with four IBM Gold Consultants and seven IBM Champions for Data and AI.



Find out more about Triton Consulting
www.triton.co.uk



Find out more about WebSphere **here**

Contact us

Contact us to get an expert assessment of your WebSphere environment.

Rob Gould

Business Development Lead

+44 (0) 870 241 1550

+44 (0) 7710 410773

rob.gould@triton.co.uk

Iqbal Goralwalla

Head of Database Services

+44 (0) 870 241 1550

+44 (0) 7919 013 065

Iqbal.goralwalla@triton.co.uk

Alan Roberts

Sales and Business Development

+44 (0) 870 241 1550

+44 (0) 7843 327 638

alan.roberts@triton.co.uk