Deliver industry-leading business continuity for SAP solutions

How to maintain continuous operations for business-critical SAP applications on the IBM z Systems platform

Highlights

- Protects business-critical applications with automated failover and recovery
- Reduces the risk of lost revenues and reputational damage
- Automates essential infrastructure tasks
- Meets governance and compliance requirements around data security

Many companies run their business-critical processes on SAP applications, which manage everything from finance and accounting to supply chains. Companies need these SAP applications and the systems underlying them to support business continuity, security, automated operations and optimal support for integration tasks; the protection of customer and sensitive data is a business and legal requirement.

Particularly for global enterprises, SAP application downtime—planned or unplanned—may be commercially unacceptable. Companies want to reduce the risk of lost revenues and reputational damage by protecting their business-critical applications through advanced resilience techniques, automated failover and recovery to ensure continuous operations. Techniques include eliminating manual processes, which are time-consuming and prone to human error, and meeting governance and compliance requirements around data security by automating system management, maintenance, and administration tasks.

In practice, SAP application downtime can be incurred through planned outages for maintaining the infrastructure or SAP applications, or through unplanned outages resulting from physical disasters, hardware failure, software failure or administrative errors. The financial impact of SAP application downtime can rapidly run out of control. Potential sales can be lost, impacting revenues, and customer confidence can be severely shaken. The time and cost of the subsequent recovery may be relatively cheap compared with the wider, long-term reputational damage. Customers, suppliers and partners expect to be able to transact business at any time, 24x7, and application unavailability is becoming commercially unviable.

IBM® offers proven, mature technologies for the infrastructure stack that enable continuous operations through inherent system resilience, sophisticated solution monitoring and management, and automated failover and recovery. These solutions are continuously being enhanced to reduce business risk for large enterprises.

Increasing business continuity for SAP applications

The IBM Business Continuity solution for SAP is a set of best practices that help ensure high availability for SAP applications on the IBM z Systems® platform. These best practices are continuously being adapted and verified to support new or changed SAP features and functions, and other software and hardware parameters. The IBM Business Continuity solution is designed to provide the highest possible availability. It aims to help customers:

- Reduce planned outages and provide continuous availability for SAP applications
- Minimize the effects of unplanned outages
- Reduce manual errors and the risk of outages
- Respond reliably to unpredictable spikes in demand

To enable near continuous availability for SAP solutions on IBM z Systems, IBM and SAP work together to ensure that their respective infrastructure and application layers function seamlessly. The IBM z Systems environment and its associated storage, database and systems management components are closely integrated, and enable a highly automated, robust, manageable infrastructure for even the largest SAP solution landscapes. Continuous collaboration between IBM and SAP helps make IBM z Systems the most available platform for running business-critical SAP applications.

The goal is to eliminate any possible single point of failure through redundancy and automation, on both the hardware and software side. The z Systems platform is designed for 99.999 percent availability. Using proven clustering technologies such as the IBM Parallel Sysplex® including the Coupling Facility, near-continuous availability can be achieved for SAP applications.

Additionally, IBM DB2® database software offers a parallel architecture that allows data to be distributed across different physical and virtual machines, making data available from any point and resilient to any specific component failure. DB2 in data-sharing mode is a true parallel database server, supporting Online Backup and Online Reorg.

The IBM Business Continuity solution for SAP uses IBM Geographically Dispersed Parallel Sysplex™ (GDPS®). GDPS is a multi-site, end-to-end application availability solution that enables management of remote copy configuration and storage subsystems, and supports synchronous and asynchronous data mirroring technology such as Metro Mirror or Global Mirror.

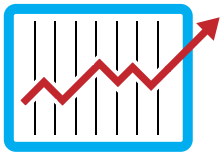
GDPS in turn is based on the IBM System Automation product suite, which provides the means for fully automating the management of all SAP components and related products running on the z/OS®, AIX®, and Linux operating systems.

IBM System Automation for z/OS, without or together with IBM Tivoli® System Automation for Multiplatforms, provides the secure, reliable services that help to ensure ultra-high availability of systems and databases.

The System Automation software automatically identifies system, application, and resource failures in clusters and cross-clusters, and uses sophisticated, policy-based knowledge about application components and their relationships to implement corrective actions within the right context.

Robust and tested best practice policies for the System Automation software model all components of SAP business applications on z Systems as well as SAP application servers on Linux for z Systems, Linux on x86, and AIX. System Automation for z/OS, alone or in cooperation with Tivoli System Automation for Multiplatforms, manages all components of an SAP on z Systems solution.

The next step to reduce the overall business downtime for SAP updates is the Zero Downtime Option of SAP Software Update Manager (SUM). Check with SAP on how to obtain this option.



24/7 BUSINESS CONTINUITY

Can you rely on your systems and applications to support business continuity?

Choose IBM z Systems

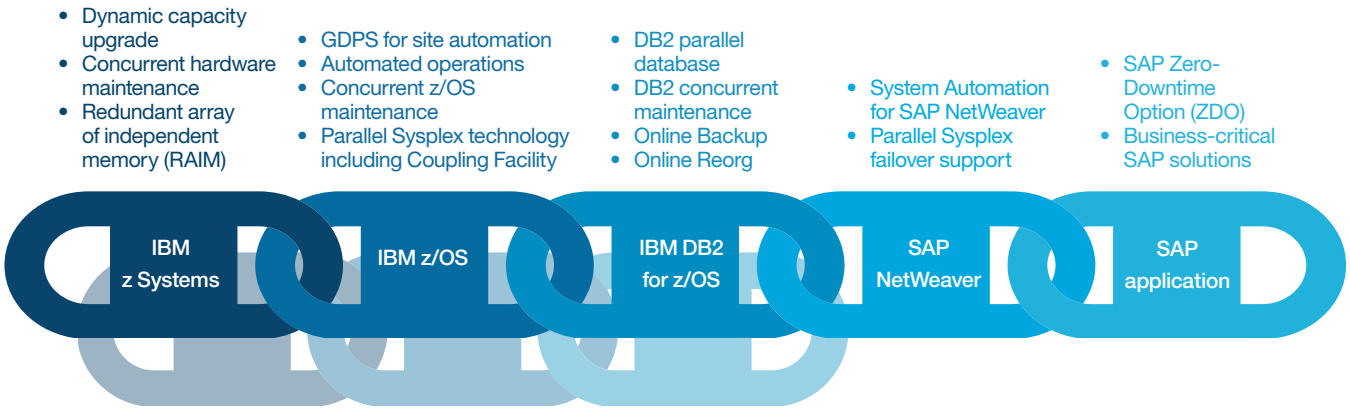
The IBM z Systems platform enables even very large SAP solution landscapes to run within a single logical environment, controlled from a single point. This replaces complex, multi-server landscapes featuring different management solutions with a simplified software stack and a comprehensive infrastructure, forming an integrated solution running on mature, reliable and scalable z Systems architecture.

Combined with technologies for synchronous and asynchronous data mirroring and the Tivoli System Automation software, the IBM z Systems platform offers mature, advanced solutions that provide exceptional business continuity for SAP operations.

Maintaining business continuity enables global enterprises to reduce the risk of foregone revenues and reputational damage caused by SAP application downtime. For enterprises running business-critical SAP solutions, IBM z Systems offers an ideal platform for keeping processes operational and information accessible—delivering the continuity enterprises need to boost business productivity.

"Uptime, reliability and stability were the key parameters. We didn't want downtime unless we chose it, and we wanted scale, both of which lead us to IBM System z platform."

— Richard Heeley, Programme Director, Nationwide Building Society



The IBM z Systems, IBM z/OS and IBM DB2 for z/OS components are redundant and therefore support extremely high availability.

Together, these components form the Business Continuity solution for SAP on IBM z Systems.

For more information

To learn more about running SAP applications on IBM z Systems, contact your IBM sales representative or IBM Business Partner, or visit us at **ibm.com**/systems/z/solutions/editions/sap-applications.html or **ibm.com**/services/us/en/sap/solutions/systemz.html.

Share with other users and experts in the SAP on IBM z Systems Community at **ibm.biz**/BdHmpM

Find more details in an IBM document on business continuity for SAP on IBM z Systems at http://publibfp.dhe.ibm.com/epubs/pdf/iapacs09.pdf

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