

## **COMPREHENSIVE SECURITY FOR SAP® Business ByDesign™**

### A SECURE WAY TO GROW YOUR BUSINESS – ON DEMAND

Midsized companies with big plans to grow understand that in addition to great products and services, they need business processes that contribute to their overall operational excellence. For starters, they need full-function business applications to advance visibility and control over key areas of their business. On-demand applications – also known as “software as a service” – offer midsized companies these advantages along with reduced operational complexity, reliable security, privacy protection, and high availability.

The SAP® Business ByDesign™ solution is an integrated, adaptable, on-demand business solution that is managed, monitored, and maintained by SAP experts. On-demand access to the solution and your business data for SAP Business ByDesign requires only a standard Web browser, thereby simplifying your IT requirements.

Advances in reliability of data centers, encrypted Internet connections, and current operational technologies make SAP Business ByDesign comparable in security to on-site installations. SAP's extensive experience and global resources help to ensure that the security and compliance support for SAP Business ByDesign exceed what most midsized companies can manage with their own resources.

This paper focuses on the physical and software security functionality built into SAP Business ByDesign.

#### **Secure Web-Based Access to Your Business Information**

Connecting to the SAP Business ByDesign solution and data is simple for customers but difficult for attackers or unauthorized personnel. To safeguard your solution and business data, SAP provides security through multiple levels of both physical and software defenses. The SAP Business ByDesign solution and the SAP Business ByDesign Business Center – a portal where prospects and customers, for example, can view product demonstrations and white papers and participate in online communities – have secure access through a combination of dedicated on-site links, virtual private networks (VPNs), and unique user IDs and passwords.

The on-site link, a crucial element of the SAP Business ByDesign topology, is a connectivity appliance that controls access from your browsers to your on-demand proprietary information. From your network, the on-site link creates a dedicated, trusted connection using encrypted VPNs to the data center running SAP Business ByDesign, allowing access only to authorized parties. This combination of security techniques prevents a third party from gaining access to your information, even with a stolen user ID and password, because they are not connecting through your physical on-site link. This unique architecture also isolates customer-specific business data so that SAP customers cannot access the data of other SAP customers.

Midsized companies needing robust business applications that are simple to use and manage can turn to the SAP® Business ByDesign™ solution. Operated and maintained by SAP, the solution simplifies your IT infrastructure, making it easy to maintain while providing security comparable to an on-site installation.



## Data Center Protection and Privacy

The data center that supports SAP Business ByDesign incorporates multiple safeguards for physical data security and integrity. It also provides high availability of your business data through the use of redundant networks and power systems.

### Asset Protection and Data Integrity

SAP follows operating best practices for data centers by deploying computation and storage parts of the solution over separated fire-safe areas to support disaster recovery in the event of a fire. For data backup and recovery purposes, a redundant hardware storage system performs regular backups. To provide enhanced data integrity, SAP Business ByDesign uses an advanced database management solution to store customer data and securely isolate each customer's business information in its own database instance.

### Power Backup and Redundancy

The data center maintains multiple connections to several power companies, making a complete power outage highly unlikely. Even if the local power grid fails, the data center supporting SAP Business ByDesign has an uninterruptible power supply for short-term outages and a diesel generator backup power supply for longer-term outages. Therefore, power interruptions or outages are unlikely to affect customer data or solution access.

### Restricted Physical Access

The current data center, located near SAP headquarters in Germany, is manned 24x7, 365 days a year. A biometrics security system restricts access to authorized personnel, and the data center is partitioned so authorized personnel can access only their designated areas.

### Data Encryption

SAP relies on transport-layer security encryption technology via VPNs to prevent unauthorized parties from intercepting network traffic. The required encryption software for customers is part of up-to-date client operating systems and browsers.

### Network Security

The network for SAP Business ByDesign employs a number of technologies. The multilayered, partitioned, proprietary network architecture permits only authorized access to the data center that supports SAP Business ByDesign with features that include:

- Reverse proxy farms that hide the network topology from the outside world
- Multiple Internet connections to minimize the impact of distributed denial of service (DDoS) attacks
- An advanced intrusion detection system that continuously monitors solution traffic for possible attacks
- Multiple firewalls that divide the network into protected segments and shield the internal network from unauthorized Internet traffic
- Third-party audits performed throughout the year to support early detection of any newly introduced security issues



Assigning work centers to users gives them the back-end access rights to the data and functionality in that work center. What users see exactly matches the appropriate access rights, which simplifies training.

## Role-Based Access and Security

You control who accesses your SAP Business ByDesign solution through segregation of duties via role-based access management within the solution's work centers. Access can be fine-tuned to reflect the areas of responsibility of individual users, which means you don't need SAP to set up and manage your SAP Business ByDesign accounts.

### Set Security with User Access

Access to data is restricted by types of users. SAP Business ByDesign is set up for the following:

- Key users can access the SAP Business ByDesign Business Center to configure the solution and grant and revoke access to end users.
- End users use SAP Business ByDesign according to the authorizations granted them by key users.
- Support users can access a production installation of SAP Business ByDesign for maintenance purposes only. Their actions can be supervised by the customer in application sharing, which is just one form of remote connection. Remote logon to the customer's solution in the data center is also monitored and recorded.

### Keep Roles Distinct and Separate with Work Centers

Functionality within SAP Business ByDesign is grouped into work centers. Your end users are assigned the work centers they need to perform their job (for example, supplier invoicing or outbound logistics). Assigning a work center to a user automatically provides that person with the back-end access rights needed to access the data and functionality in that work center. The functionality the user sees on the solution interface exactly matches their appropriate access rights, which simplifies training.

You can restrict rights by specifying that a person can work only for a certain department in a work center. For example, a user can be restricted to work on sales orders for a specific regional office but not for any other

region. Processes for creating users and managing their access rights are tightly integrated with relevant HR processes that map to your organizational structure.

### Prevent Business Conflicts with Segregation of Duties

Segregation of duties (SoD) helps reduce the potential for damage from the actions of one person who could carry out and conceal errors or irregularities in the course of performing day-to-day

## SAP follows operating best practices for data centers by deploying hardware and software (database) components over various fire-safe areas to support disaster recovery.

business operations. By applying segregation of duties through user authorizations, SAP Business ByDesign offers a high level of control for multimodule software. The solution enables you to build effective and efficient internal controls – based on a catalog of predefined SoD rules – to avoid common business conflicts.

### Make It Easy to Comply with Regulations

Quality standards and regulations for accounting-relevant systems help ensure that data is stored, processed, and retrieved in an accurate, orderly, and timely manner to provide a com-

plete view of a company's financial situation. SAP Business ByDesign helps companies meet the quality requirements from common standards.

Features that support compliance include but are not limited to:

- Journal entries that carry the complete information necessary to identify the respective business transaction and trace it through references to the underlying source documents
- Number ranges that support the ability to distinguish entries from each other so they can be retrieved precisely in every situation. By default, accounting-relevant data cannot be deleted, and all changes made to financially relevant data are recorded in a change-history log. As a result, SAP Business ByDesign helps customers perform audits.
- Documentation of the software solution that includes not only procedure and task descriptions for end users but also detailed technical descriptions explaining the processing and storage of data

### Secure, On-Demand Business Solution

SAP Business ByDesign offers customers an integrated solution that is easy to use and easy to configure. If you are considering an on-demand business solution, SAP Business ByDesign experts would like to discuss your specific requirements.

Please call your SAP representative or visit us on the Web at [www.sap.com/bydesign](http://www.sap.com/bydesign) for more information.

---

## Summary

To successfully compete with enterprises of all sizes and capabilities, midsize companies need business applications that connect their internal processes and give them control over their business. But they need this with reduced IT complexity and enhanced usability. The SAP® Business ByDesign™ solution is on-demand business software that is managed, monitored, and maintained by SAP experts, simplifying IT requirements and providing clear cost of ownership. As an integrated, adaptable business solution, it gives you visibility and control over key areas of your business.

---

## Business Challenges

- Run comprehensive business software at clear cost, reduced complexity, and minimal IT effort
- Achieve security, privacy protection, and availability of your business software and data
- Support users in their daily activities with business software that reduces the learning curve and is easy to use

---

## Supported Business Processes and Software Functions

- Network security – Use sophisticated technology, such as virtual private networks (VPNs), to secure data network transmissions and guard against unauthorized access
- Data security – Keep your critical business data safe by taking advantage of both physical and software defenses
- Business operations – Minimize business conflicts involving your personnel with rules and workflow functionality built into work centers and segregation of duties

---

## Business Benefits

- **Establish a clear total cost of ownership** with an IT infrastructure and support that minimizes your IT resource requirements
- **Reduce the risk of data theft and business disruption** by leveraging the skills of SAP experts to maintain the reliability, availability, and privacy of your business software and data
- **Increase your employees' business focus** with a simple-to-use business solution that lets them think in terms of business-language administration instead of the details of information technology

---

## For More Information

Call your SAP representative or visit us at [www.sap.com/bydesign](http://www.sap.com/bydesign) to learn more about SAP Business ByDesign.

50 088 389 (08/11)

©2008 by SAP AG.

All rights reserved. SAP, R/3, xApps, xApp, SAP NetWeaver, Duet, PartnerEdge, ByDesign, SAP Business ByDesign, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world.

Business Objects and the Business Objects logo, BusinessObjects, Crystal Reports, Crystal Decisions, Web Intelligence, Xcelsius, and other Business Objects products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Business Objects S.A. in the United States and in several other countries all over the world. Business Objects is an SAP company.

All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.