

Identity-Enabled Business-to-Business Integration

A Comprehensive Approach to Managing Large-scale B2B Relationships

Highlights

The only single-source solution for maintaining multiple trading-partner relationships and managing the entire transaction and trading-partner lifecycle.

- Comprehensive B2B integration capabilities along with identity management
- Support for relationships with hundreds of thousands of trading partners
- Proven scalability in environments processing millions of transactions
- SOA-based and compliant with industry standards for data encryption and transmission
- Industry-leading, identity-based access management
- Automated for cost control, operational efficiency, and data accuracy
- Complete tracking, reporting, and auditing of data access activities



Today's enterprise is pursuing business-to-business integration with trading partners on an unprecedented scale. These integration projects span a broad variety of relationships with trading partners and may support relationships between, for example, manufacturers and their suppliers, healthcare providers and insurance companies, or companies that provide data to one another as part of a Web site data conglomeration. As the number of its trading partners climbs into the tens — or even hundreds — of thousands, the enterprise finds it increasingly challenging to meet the transaction-management and reporting demands associated with integration on such a large scale. Traditional point-to-point integration solutions, which were never intended to serve more than two parties over a private communications channel, cannot support relationships with thousands — let alone hundreds of thousands — of trading partners in any practical way.

The enterprise and its trading partners are better served today by a single, centralized business-to-business (B2B) integration platform from which to manage relationships with multiple partners. The problem, however, is that many B2B solutions fail to address the entire transaction and trading-partner lifecycle. As a result, many enterprises launch trading-partner integration projects only to discover that they must implement multiple products to address multiple requirements, including:

- On-boarding trading partners
- Provisioning trading-partner accounts
- Managing user access to resources
- Auditing transactions
- Delivering self-service capabilities to partners

In addition, the enterprise must be able to carry out all these functions while keeping costs under control and meeting stringent security and compliance requirements. It is difficult, if not impossible, to meet these goals using multiple solutions that were not designed to work together.

What's needed is a single-vendor solution that automates the full range of integration functions and processes for growing numbers of trading-partner relationships. Such a solution can reduce the costs of large-scale trading-partner integration and ensure that integration projects are secure and compliant.

The benefits of identity-enabled B2B integration from Sun

Sun's approach to B2B integration is the only one to incorporate industry-leading identity management. This allows the enterprise to consolidate and automate all the access control, auditing, and other functions required to efficiently and securely manage relationships with large numbers of trading partners.

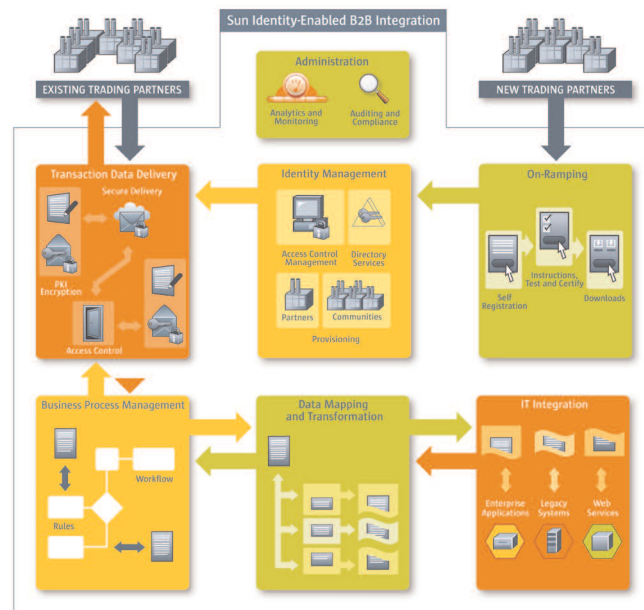
Efficient management of large complex networks of trading partners

Identity-enabled B2B integration from Sun is scalable to hundreds of thousands of trading partners conducting millions of transactions across many different applications and systems. Sun can deliver a guaranteed and consistent, reliable response time for exchanging messages with trading partners, providing the B2B platform for enterprise environments with more than a million B2B transactions a day that are linked to core enterprise business processes.

Within large-scale deployments, identity-enabled B2B integration makes it possible to automate the processes associated with B2B activities such as trading-partner onboarding, ongoing management, and transaction management and reporting. Because Sun's approach is identity-enabled, there is no need for a separate solution to automate identity-specific processes such as trading-partner provisioning and access control management. Automation eliminates the need for costly manual processes and multiple technology solutions, which are ultimately impractical and ineffective in large complex environments anyway.

Sun's comprehensive approach to B2B integration is the only one to incorporate industry-leading identity management.

As an open, standards-based approach to trading-partner integration, identity-enabled B2B integration increases efficiency and reduces costs by making resources reusable across trading partners and projects. Being able to apply the same document formats, integration



Sun provides a comprehensive set of tools, including industry-leading identity management, to manage multiple B2B integration projects.

interfaces, source files, and other resources to an infinite number of integration projects — instead of developing new applications for every trading partner — dramatically speeds project development time. It also eliminates the need to assign a development team to every individual partner integration. This makes Sun's approach a practical, cost-effective alternative to one-off point-to-point solutions.

Significantly reduced security risks

Exposing internal business processes to trading partners on the extranet carries an inherent risk to enterprise security. This risk is intensified when trading-partner transactions are managed manually, creating the potential for human error to compromise the security of enterprise information on the extranet.

Identity-enabled B2B integration from Sun is intended to maintain the security of information exchanges with trading partners throughout the transaction lifecycle. It automates processes such as access authorization and identity authentication to help ensure that:

- Messages delivered on the extranet reach *only* their intended recipients
- Both recipients and senders of information are who they claim to be
- Unauthorized parties cannot tamper with data as it is being transmitted

Compliance with standards is also an essential component of risk reduction because it ensures strong support for processes such as data encryption, secure transmission, and identity authentication. The following diagram demonstrates how identity-enabled B2B integration from Sun complies with widely accepted industry standards in all of these areas.

Capabilities at a glance — Sun identity-enabled B2B integration streamlines the processes associated with establishing and managing relationships with trading partners, enables complete transaction visibility across the enterprise and extranet, and provides auditing capabilities for the full transaction lifecycle.

Feature	Function	Benefit
Identity-Enabled Trading-Partner Management	<ul style="list-style-type: none"> Provides a single view in an organization's internal and external (extranet) relationships with trading partners Enables policy-based trading-partner access management Enables content-based restrictions on document types 	<ul style="list-style-type: none"> Lowers the operational requirements for managing high-volume extranet environments by providing a central repository for trading-partner and relationship information
Identity-Enabled Standards-Based Delivery Protocols	<ul style="list-style-type: none"> Enables compliance with industry-accepted payload transport Enables once-and-only-once guaranteed delivery of payload 	<ul style="list-style-type: none"> Provides guaranteed and auditable transaction delivery
Standards-Based Business-Document Protocols	<ul style="list-style-type: none"> Allows a standard format for exchanging electronic business documents Allows for standardized policies for content-based document routing 	<ul style="list-style-type: none"> Fosters smooth, secure flow of information between enterprise and trading partners
Identity-Enabled Standards-Based Security Services	<ul style="list-style-type: none"> Provides strong message encryption support Enables non-repudiation Allows for identity synchronization Provides digital-certificate support and processing 	<ul style="list-style-type: none"> Significantly reduces the security risks associated with trading on the extranet
Full-Cycle Transaction Auditing	<ul style="list-style-type: none"> Displays a summary view of every transaction Allows drill-down on each transaction for every event that occurred to it 	<ul style="list-style-type: none"> Supports auditing requirements with detailed comprehensive tracking of every event associated with the transaction lifecycle
SOA-Based Extensibility	<ul style="list-style-type: none"> Allows for complete customization through well-defined, service-based integration points Allows for rapid development of custom protocols 	<ul style="list-style-type: none"> Ensures a high degree of flexibility to support both legacy and future B2B integrations
Highly Scalable Architecture	<ul style="list-style-type: none"> Enables horizontal scaling Provides support for clustering environments 	<ul style="list-style-type: none"> Provides a reliable and highly available service resource to support ever-increasing demand
Delivery Protocols	<ul style="list-style-type: none"> Provides always-on dial tone for connecting to trading partners Resolves transmission errors according to policies Verifies message origination, message validation, and message delivery (once and only once) Provides digital signatures 	<ul style="list-style-type: none"> Provides guaranteed delivery, retries, and acknowledgements Provides non-repudiation Assures sender and receiver of trading-partner identity Ensures secure delivery over the Internet
Business Protocols	<ul style="list-style-type: none"> Provides organized, standardized business-document payloads 	<ul style="list-style-type: none"> Provides document assurance and stability to the message process flow
Secure Management Extensions/Keystore (SME/KS)	<ul style="list-style-type: none"> Enables strong encryption in the form of digital certificates 	<ul style="list-style-type: none"> Provides assurance of message origination
Compliance with All Three Major Health Insurance Portability and Accountability Act (HIPAA) Validation Engines <ul style="list-style-type: none"> Claredi Foresight Edifecs 	<ul style="list-style-type: none"> Provides freedom to enlist any of the major firms in this sector 	<ul style="list-style-type: none"> Reduces vendor lock-in for compliance reporting requirements

Full auditing capabilities to help ensure regulatory compliance

To demonstrate compliance with regulations governing data privacy and security, the enterprise must implement strict access controls, provide auditable evidence of controls that are in place, and report accurately on trading-partner access to data over time. This can be challenging enough just within the enterprise. It is that much more difficult when it involves sharing data with external trading partners.

Automation is essential to accurately tracking and reporting access and to generating auditable evidence of access controls. By identity-enabling B2B integration, Sun automates manual transaction-management processes, introduces audit data to the enterprise security infrastructure, and ensures that audit controls are enforced throughout the transaction lifecycle.

Effective transaction auditing requires that the enterprise track and demonstrate the flow of data both into and out from the enterprise throughout the transaction lifecycle. Identity-enabled B2B integration provides both transaction auditing and access auditing to enterprise resources.

From the leader in open, integrated enterprise solutions

Successful B2B integration relies on having an open, standards-based platform in which applications and systems are interoperable and portable. Sun has long led the way in promoting open standards, as a proponent and supporter of open source development and as an active participant in standards-setting initiatives such as the Liberty Alliance Project.

Sun has earned industry recognition as a provider of both B2B and identity management solutions. Gartner named Sun a Visionary in its B2B Gateway Providers Magic Quadrant for Q1/2006. And the Sun identity management portfolio has also been widely recognized by industry analysts. Sun Java System Identity Manager, in particular, has been singled out as a leader in its field in a number of analyst reports, including the Gartner User Provisioning Magic Quadrant and the Forrester Wave report on provisioning.

Business-to-Business Suite Specifications

Platforms

- Sun Solaris 8, 9, and 10 Operating Systems on SPARC® platforms
- Windows 2000, 2003, and XP
- HP-UX 11.0 and 11i (PA-RISC)
- IBM AIX 5.2 and 5.3

Required software

- LDAP server — Sun Java System Directory Server (recommended)
- Oracle Database server

Delivery protocols

- Applicability Statement 2 (AS2)
- RosettaNet Implementation Framework (RNIF) 1.1 and 2.0
- ebXML Message Service v 2.0

Business protocols

- HIPAA
- Accredited Standards Committee (ASC) X12
- Electronic Data Interchange For Administration, Commerce, and Transport (EDIFACT)
- X12 4010 and 5010
- National Council for Prescription Drug Programs (NCPDP) Script

Security protocols

- SME/KS

Learn more

Stay connected to B2B and identity management news and trends by joining the Sun Integration Insights Program and the Sun Identity Insights Program at sun.com/subscribe. As a member of each program, you will receive an eNewsletter, exclusive invitations to Net Talk events and expert exchanges, and information on upcoming events and special offers.

About Sun

A singular vision, The Network is the Computer™, drives Sun in delivering industry-leading technologies that focus on the whole system — where computers, software, storage, and services combine. With a proven history of sharing, building communities, and innovation, Sun solutions create opportunities, both social and economic, around the world. You can learn more about Sun at sun.com.

For more information

To learn more about Sun's identity-enabled approach to B2B integration, visit sun.com/b2b.