The Virtual Van

Business Integration Technology’s “The Virtual VAN™” delivers state-of-the-art B2B integration technology leveraging the strengths of BIT’s EME Enterprise Messaging Engine in each trading partner’s data center and Amazon.com’s hosted Web services. The Virtual VAN™ is designed, implemented, and managed by full-time B2B specialists with core competency in protocols, formats and inter-enterprise messaging. The Virtual VAN™ delivers the value of a value-added network (VAN) without giving up control and without payment of large, on-going transaction fees.

- Amazon is responsible for:
  - Virtualized message store
  - Hosted message routing
  - Virtualized configuration
  - Virtualized software repository

- BIT and BIT’s EME is responsible for:
  - Security
  - Protocols
  - Message transformation
  - Enterprise integration

Key Features: A virtual hub eliminates the need for a vulnerable publicly assessible Internet communications server. The Virtual VAN™ provides exceptional security. It is scalable to meet any size trading community needs. It provides lightweight deployment and update. Messaging can integrate directly with enterprise systems. The Virtual VAN™ supports remote configuration of trading partners and outsourced maintenance.

Virtual hub: Amazon SQS Simple Queue Service provides the public Internet presence. All trading partners communicate from behind secure firewalls using ‘push’ and ‘polling pull.’ No Internet communications server required. There is no cost for Internet communications server hardware or Internet communications software costs. No server support or maintenance is required. There is no Internet vulnerability from a communication server. The elimination of an Internet communications server removes a barrier for smaller trading partners with less technology resources.
Security: SQS provides appropriate control over authentication domains, for each trading partner. EME provides authenticated, reliable, secure communications with integrity and non-repudiation.

Scalability: Amazon Web services provide the scalable high performance with high availability expected from Amazon.com. Amazon SQS supports multiple enterprise EME installations with multiple simultaneous message transmissions.

Deployment: Virtualized software distribution provides lightweight deployment and automatic updates. Trading partners receive a very small executable by e-mail or download that downloads the full EME from Amazon S3 Simple Storage Service.

Integration: Using EME’s state-of-the-art messaging backbone, protocol adapters, and message transformation, business processes can integrate directly with enterprise systems. EME supports file-system integration, message queuing middleware, database connections, and a wide range of communications protocols. Messages can be transformed “on the fly” using XSLT and XQuery. EME supports orchestration, composite applications, and service-oriented architecture.

Configuration: All configuration information is stored in S3 and securely retrieved at EME startup. The virtual EME configuration can be augmented, updated, and modified remotely to implement new business processes without any local action at the trading partner!

Key benefits of The Virtual VAN™
- Dramatically reduced B2B integration costs
- Elimination of security risk for vulnerable communications server outside the firewall
- One single connection – “hub and spoke” benefits without the cost of a hub
- Virtualized deployment enables outsourced trading partner management
- Enhanced security and reliability of message exchange
- Low cost enables new innovative collaborative business processes

About Business Integration Technology, Inc.
Business Integration Technology Inc. (BIT) is a leader in integration technology for transportation, logistics and supply chain management. BIT designs and implements highly cost-effective business-to-business connections that eliminate the costs of doing business with paper, phone and fax, bringing innovative value to shippers, carriers, 3PLs and companies looking to improve cycle time and reduce cost. BIT was founded by the team that built the messaging engine that runs North American Rail. BIT is also a partly-owned subsidiary of Daugherty Business Solutions, a firm with over 20 years of experience helping their clients achieve their business objectives through the effective use of leading information technology and more than 400 consultants in St. Louis, Atlanta, Minneapolis and Chicago.