



VISIDOT DIRECTOR

KEY BENEFITS:

- Zero shipping errors - no more claims and returns
- Improved operational efficiency
- Faster shipping processes
- Full supply chain traceability and control
- Visual proof of delivery and condition
- Seamless integration with WMS/ERP
- A reliable, field-proven solution

Visidot Director: The Zero-Error SCT (Supply Chain Traceability) Solution

Short lead times, manual processing of outbound products and dispatch bottlenecks can all lead to costly shipping errors, delivery-related disputes and even potential claims and charge-backs.

Visidot Director is a fast and effective traceability solution designed to overcome these challenges. It provides automated and error-free verification of production sequencing, shipping and other logistic processes.

A single Visidot Director is designed to support one or more Visidot gates deployed throughout a shipping depot or production facility, via a standard IP network. Visidot gates capture, analyse and decode large field of view images, providing depot operators with meaningful information on the multiple assets captured in these images, along with their exact spatial coordinates.

Visidot gates then deliver raw XML data to Visidot Director, which uses patented technology to automatically compare this information to a set of business rules, such as content validation logic, order data or sequence information, and alert operators on any discrepancy.

Alerts are presented on the Visidot gate's Operator Console in real time, along with visual guidance for corrective action. Additionally, Visidot Director may be configured to activate status indication lights, conveyor controllers, rotating tables, printers and other flow control devices, to ensure the most effective handling of any potential errors in shipment content.

Visidot Director can easily be integrated with Warehouse Management and ERP systems, and is capable of processing hundreds of tags in just a few seconds. It maintains image bank archived proof of delivery and proof of asset condition, so as to help resolve any delivery-related dispute. Visidot Director Web server delivers activity and history reports that can be viewed by authorised personnel using any Web browser. Visidot Director effectively eliminates production and shipping errors, and improves logistics operation efficiency, labor utilisation and bottom line results.

Verification

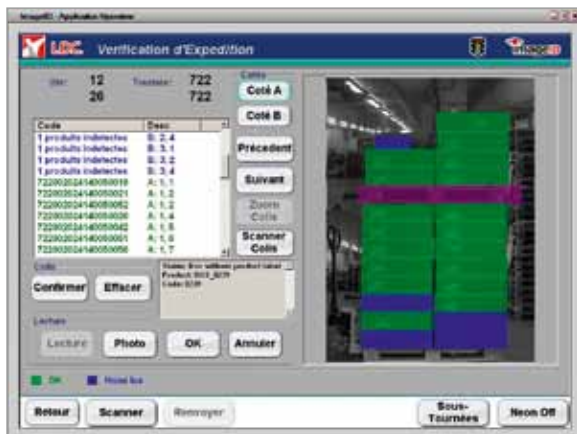
Visidot is a perfect solution in complex order preparation situations, where parameters such as weight, expiration date, batch and serial numbers must be verified. Such requirements may significantly slow down order picking processes and are prone to human errors.

Visidot Director can enforce any rule modeled in a structured "if... then... else..." manner, and apply it to decoded asset data. Typical rules may, for example, associate all assets on a particular pallet to a specific batch or validate that all assets' expiry date is within a specified range.

In case of error - the operator is notified with clear indication of the assets that need be removed, replaced or added, guaranteeing focused and effective corrective action.

DUAL: Detection of Unlabelled Assets' Location

Visidot Director provides DUAL - a unique ability to determine the type and, in some cases, even the content of unlabelled assets within a pallet. DUAL uses a machine learning mechanism and patented algorithms to produce a computerised model of the pallet and its assets, and to fill in the "holes" for unidentified assets. This model is graphically superimposed on a captured image of the pallet, which can help the operator take such corrective action as reapplying a label or replacing a non-labelled asset.



Production Sequencing and QA

Errors in production sequencing may not only result in delivery of defective products, but may also create excessive bottlenecks in product assembly lines, due to potential misalignment between manufacturing parts. Proper sequence verification, even before parts arrive at the assembly line, prevents such incidents and eliminates the high costs they lead to. Visidot Director uses its inherent verification capabilities to process batches about to arrive at the assembly line as per sequencing guidelines and rules. It ensures JIS (Just in Sequence) production, providing valuable information on parts' compatibility and alerting operators and supervisors well before errors occur.

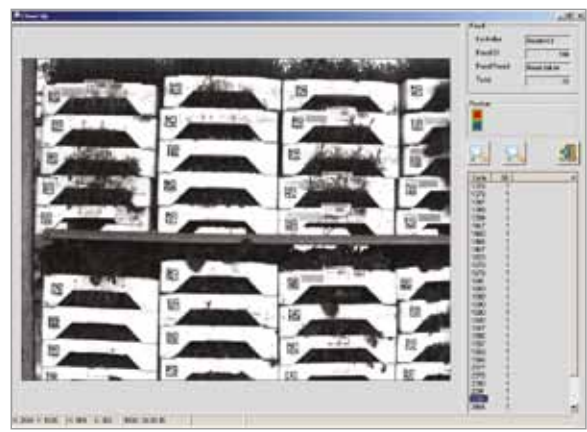


Visidot Director Image Bank

In a competitive, highly regulated and quality demanding environment, the cost implications of shipping errors are ever increasing. Vendors along the supply chain are often exposed to claims and charge backs for allegedly damaged, missing or incorrect items. For example, when a large retail chain claims it has not received an item, the supplier will typically not argue this claim without concrete proof in hand. The Image Bank is a data-base storing all captured asset images and their associated decoded data, and a Web-based viewer enabling easy image retrieval. The Image Bank provides convincing and indisputable visual proof of the status and condition of shipped pallets, as well as each asset within the pallet. Once the customer is made aware the supplier's ability to produce visual records of shipment - false claims will likely cease to exist.

Shipping Verification

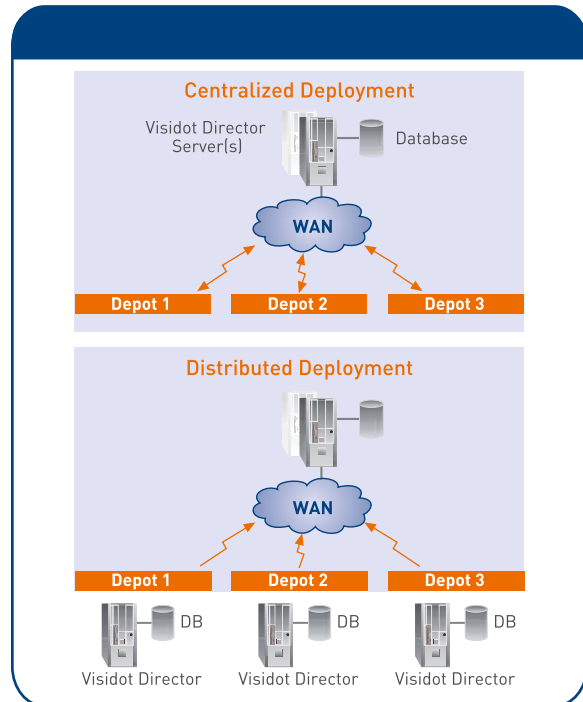
Supply chain management is becoming increasingly ERP-oriented. Orders, inventories, shipments and accounting information are all fed into and managed by WMS and ERP systems. Visidot Director seamlessly integrates with ERP and WMS systems, enabling it to retrieve and compare shipping order information from backend systems to the actual contents of a pallet to be shipped. Visidot Director's unique patented ability to compare a list of assets to be shipped with captured visual information is critical to achieving fast and accurate shipment content validation. Real-time alerts with clear indication of any discrepancy, enable corrective action before pallet is sealed.



Multi-site Logistics

Visidot Director offers geographically distributed manufacturing companies and logistics service providers a truly global view of shipping processes, inventory levels and delivery states. It can aggregate and communicate information from multiple depots to company headquarters, while maintaining a seamless, bi-directional interface with ERP and other backend systems. Visidot Director provides real-time Web-based reports on the status of orders and shipments, as well as performance statistics.

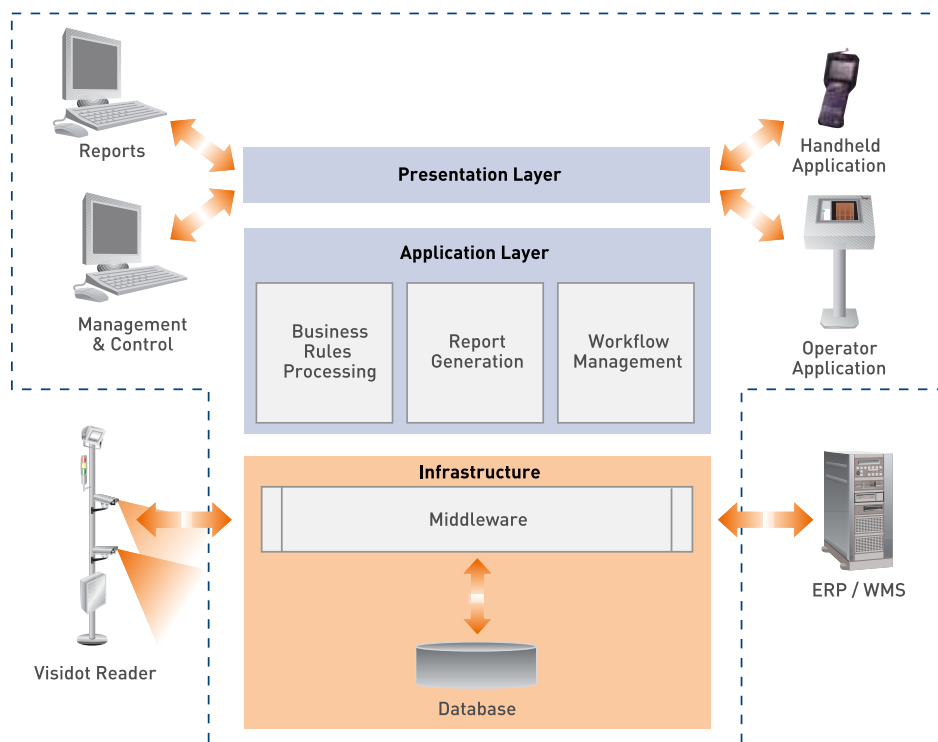
The modular architecture of Visidot Director enables seamless multiple site deployment in either centralised or distributed configuration.



Software Architecture

Visidot Director comprises:

- A data layer implemented in Oracle Database
- A middleware layer enabling easy software module integration and effortless data mapping
- Engines for business rules, reports and application workflow management
- A flexible presentation layer with support for both PCs and handheld clients



Features & Specifications

Key Features	Visual presentation of asset codes, item shape, orientation and location information
	Highly detailed information - from order to the individual asset level
	Image bank and decoded data archive
	Automatic detection/visual indication of business rule breaches
	DUAL - Detect Unlabelled Asset Location
	Web-based reports
	Support for multiple Visidot gates (co-located or distributed)
	Easy integration with a variety of image capture devices, Handheld devices and other operational triggers (motion sensors, push buttons, threshold switches, software calls and others)
	Multiple configuration options for multi-site deployment
	Remote Database backup
	Multilingual support
	Multi-level user access administration
	Software toolkit enabling development of additional applications

Architecture	Server side - comprises database, schema, data views, stored procedures and a Web server serving both client application and external applications
	Operator application - a Win32 application running on a touch-sensitive screen that displays captured images superimposed by business logic results
	Handheld application
	Web-based reports available to any HTML client

Interfaces	Visidot Reader - XML-based data collection, event listeners, remote procedure calls with dot.NET remoting for management and control
	WMS/ERP - flexible interface options, including XML/CSV file transfer and proprietary protocols

System Requirements	Hardware (minimum requirements): Server with a 3 GHz processor and 1 GB of RAM, dual Ethernet connection, dual power supply, 2 x 146 GB available hard disk space, mirrored configuration, HASP software key
	Hardware (recommended): HP Proliant ML3XX series server with 2 GB of RAM, 3 x 146 GB available hard disk space, RAID-5 configuration
	Minimum software requirements: Windows 2003 Server (English) with SP2, IIS 6.0, dot.NET Framework 2.0 with SP1, Oracle Database Express Edition

