



## Integrating WMS with PVI



Information Society  
Technologies

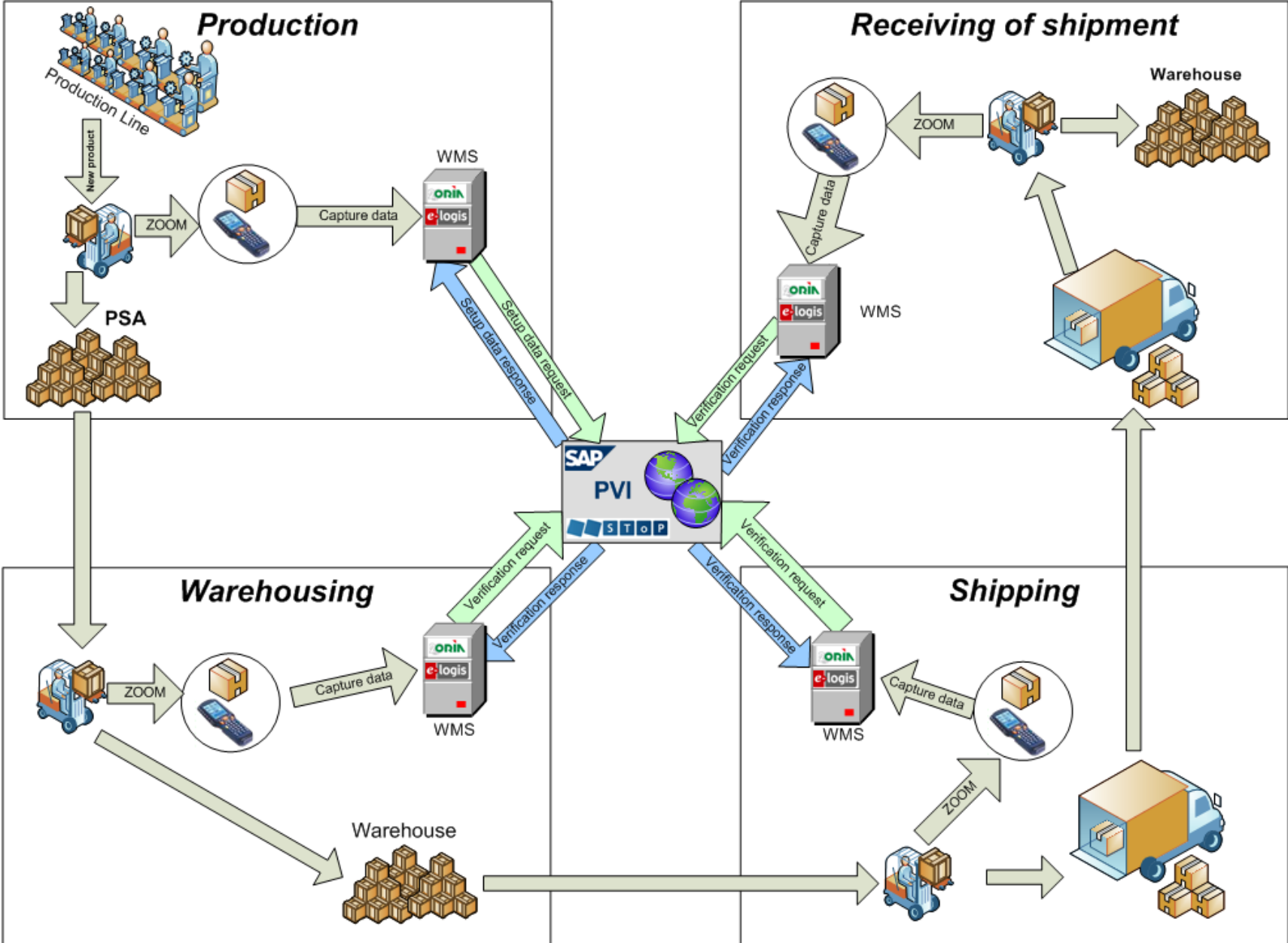


Sixth Framework Programme

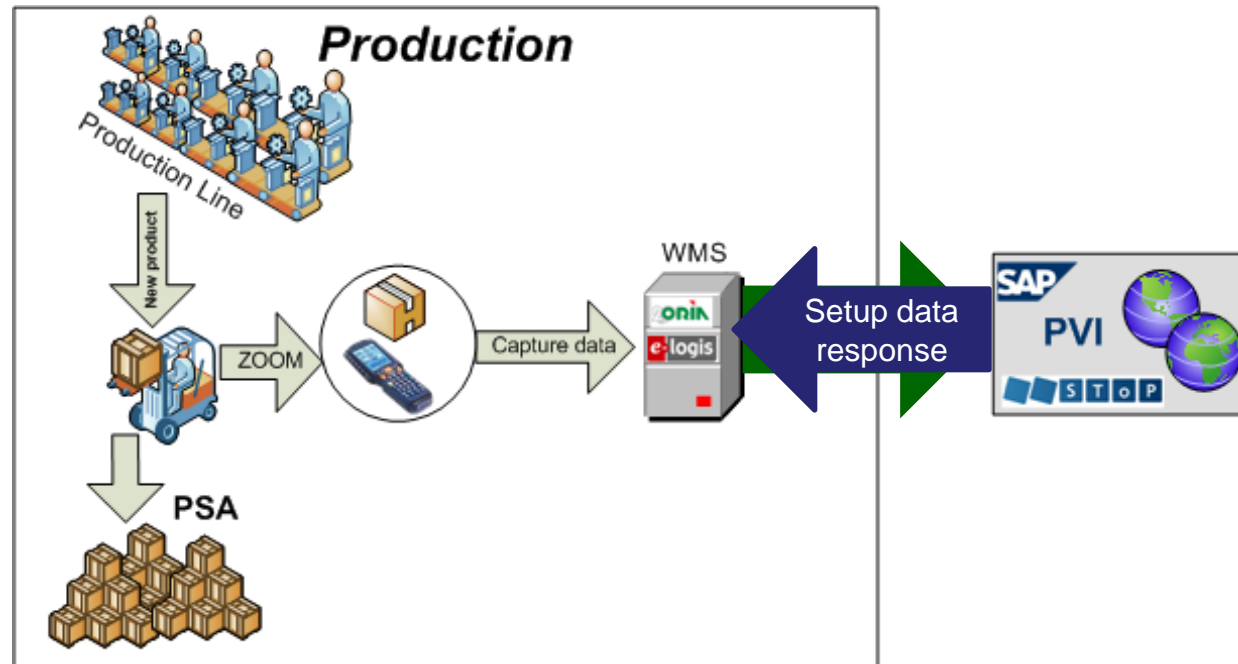
May 27, 2009

- **Integration of Warehouse Management System e-logis® & PVI in following processes**
  - **Production of water heaters (Sending information about each new product to PVI)**
  - **Warehousing (Product verification)**
  - **Shipping (Product verification)**
  - **Receiving of shipment (Product verification)**

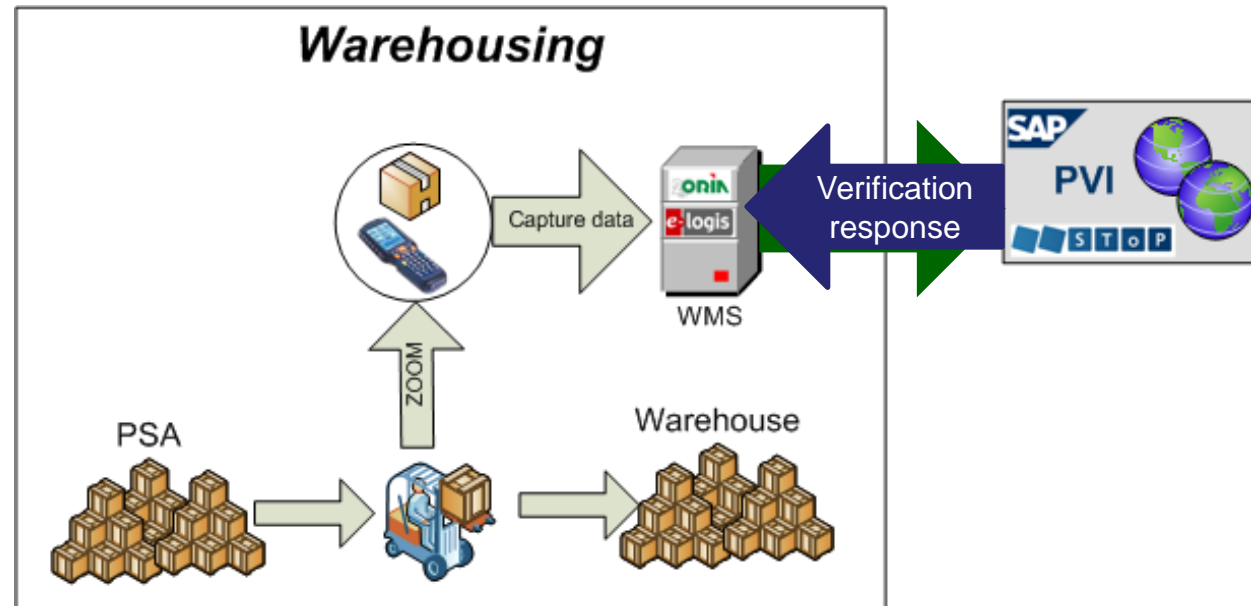
# Schema of trial processes



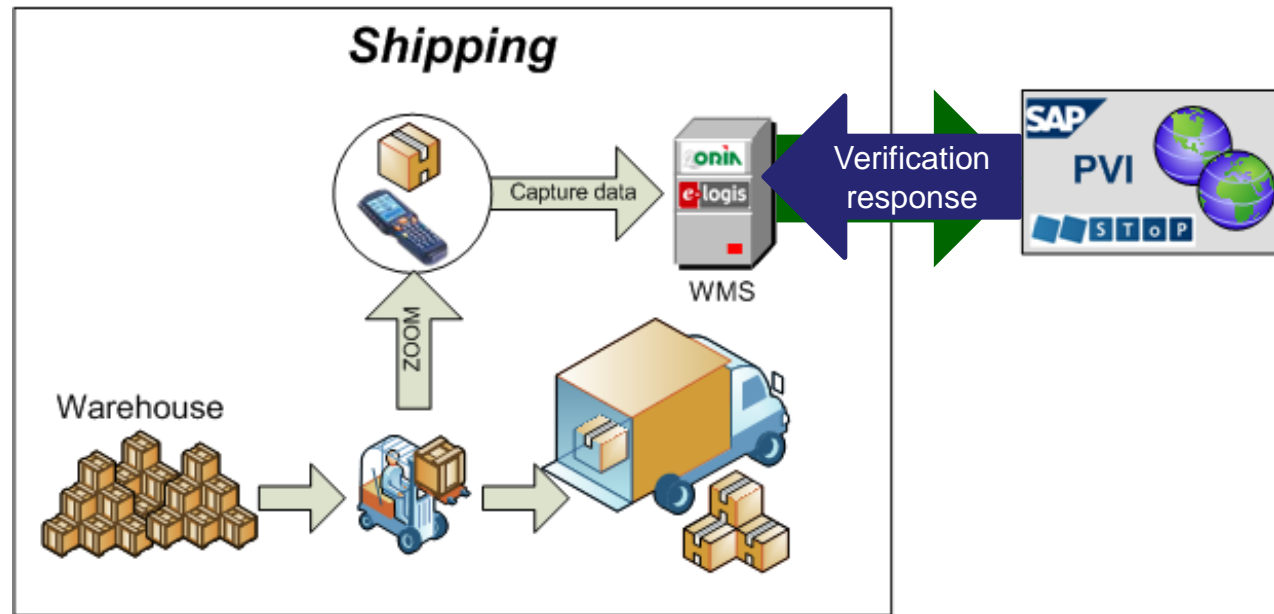
- **Send setup data to PVI**
- **Receive setup data response from PVI**
  - *Accepted*
  - *Duplicate*
  - *Error*



- **Send verification request to PVI**
- **Receive verification response from PVI**
  - *Genuine*
  - *Counterfeit*
  - *Unknown*

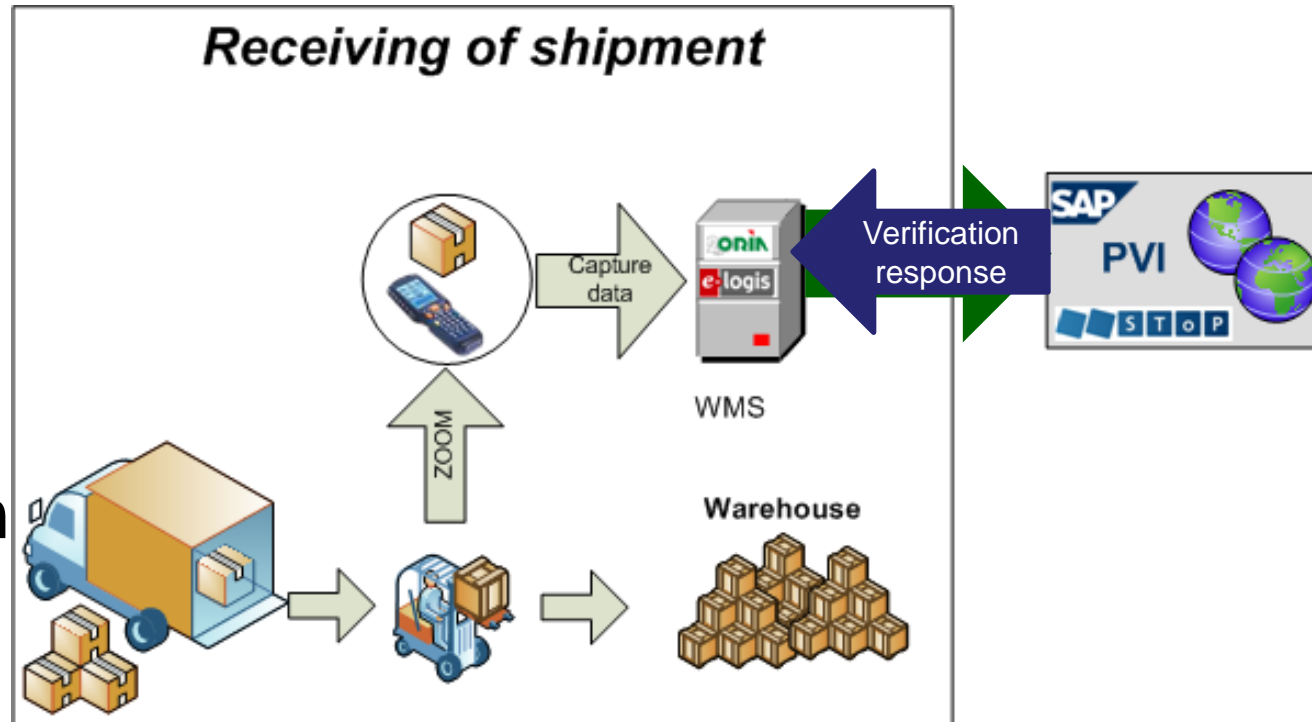


- **Send verification request to PVI**
- **Receive verification response from PVI**
  - *Genuine*
  - *Counterfeit*
  - *Unknown*



# PVI integration in receiving the shipment

- Send verification request to PVI
- Receive verification response from PVI
  - *Genuine*
  - *Counterfeit*
  - *Unknown*



# Identified potential issues



<p><b>PVI integration in production</b></p>	<p><b>PVI communication error</b> Blocking shipment of goods not reported to PVI (e-logis® allows warehousing it but keeps status 'Quarantine' to prevent shipping to customer until response 'accepted' is received from PVI)</p>	<p><b>Finding 'duplicate' items</b> Applying new tag or label Resending setup data</p>	<p><b>Damaged RFID tags or barcode labels</b> Applying new tag or label Resending setup data (should also send update to setup data of damaged HU)</p>
<p><b>PVI integration in warehousing</b></p>	<p><b>PVI communication error</b> Further investigation – items can not be shipped until successfully verified</p>	<p><b>Finding 'unknown' items</b> Possible infiltration of counterfeit goods or Mistakes at production line while receiving items to PSA</p>	<p><b>Damaged RFID tags or barcode labels</b> Applying new tag or label Resending setup data</p>
<p><b>PVI integration in shipping</b></p>	<p><b>PVI communication error</b> Blocking shipment of unverified goods</p>	<p><b>Finding 'unknown' or 'Counterfeit' items</b> e-logis® status 'Quarantine' - unable to ship Remove items from shipment</p>	<p><b>Damaged RFID tags or barcode labels</b> No manipulation with unidentifiable items</p>
<p><b>PVI integration in receiving the shipment</b></p>	<p><b>PVI communication error</b> Status automatically set to 'Quarantine' - limited further manipulation</p>	<p><b>Finding 'unknown' or 'Counterfeit' items</b> Status automatically set to 'Quarantine' - limited further manipulation</p>	<p><b>Damaged RFID tags or barcode labels</b> Apply temporary identifiers (new tags or barcodes) Communication with supplier Supplier provides permanent identifiers (tags or barcodes) and sends setup data to PVI or Buyer returns the goods</p>



# Thank you!

