



Material Composition Declarations (MCD) for EU RoHS/WEEE Compliance

Multi-Company Process Management

August 30, 2004

E2open offers Software on Demand for Multi-Company Process Management



– Leading provider of solutions for industry integration changing the economics of inter-company supply chain process management

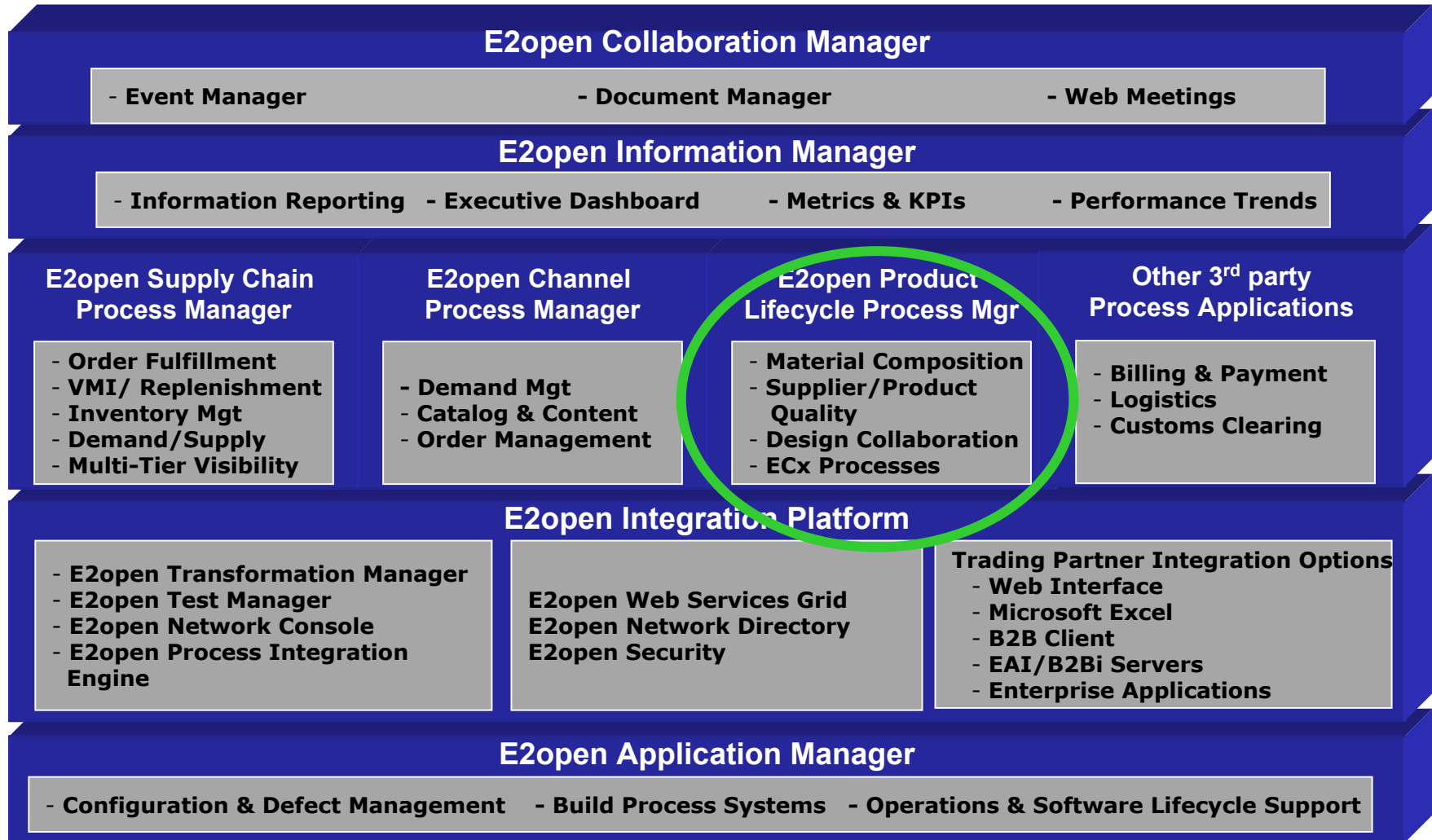
– Locations in Japan, Korea, Malaysia, Singapore, Taiwan, and United States

– Seagate, Solectron, Hitachi and other multinational hubs have deployed E2open to enable their manufacturing, distribution and logistics facilities in Singapore, Malaysia, Thailand and the Philippines integrating hundreds of their trading partners in the region

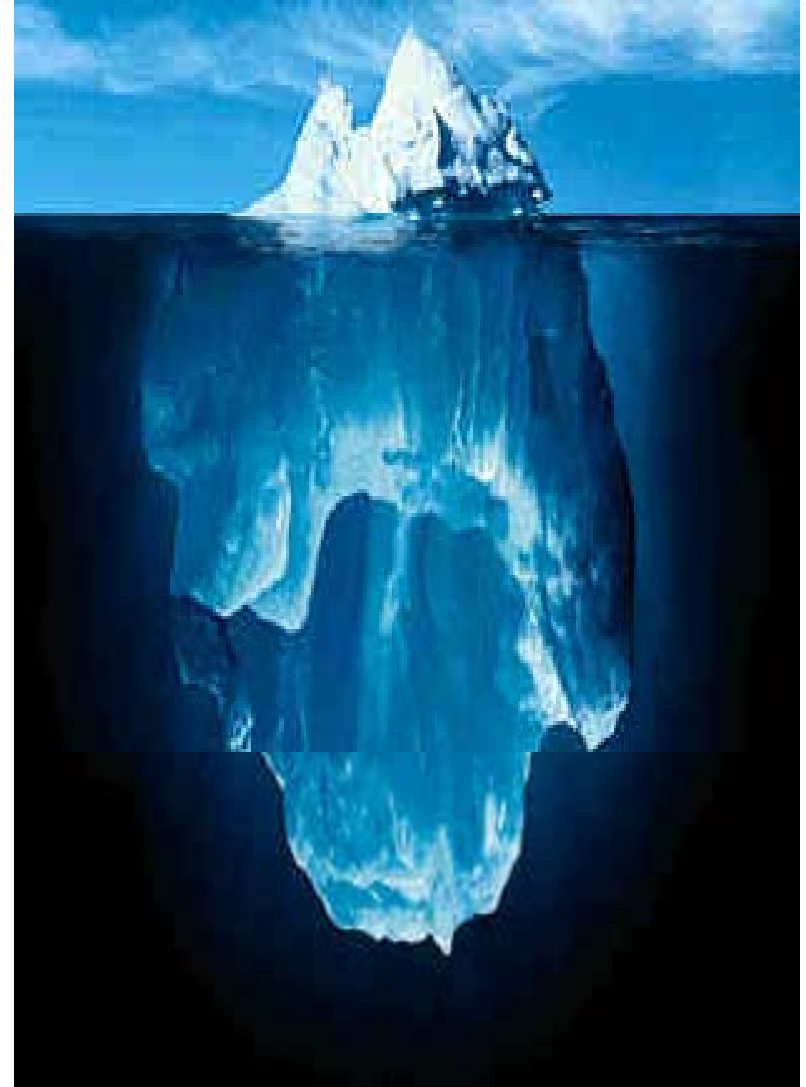
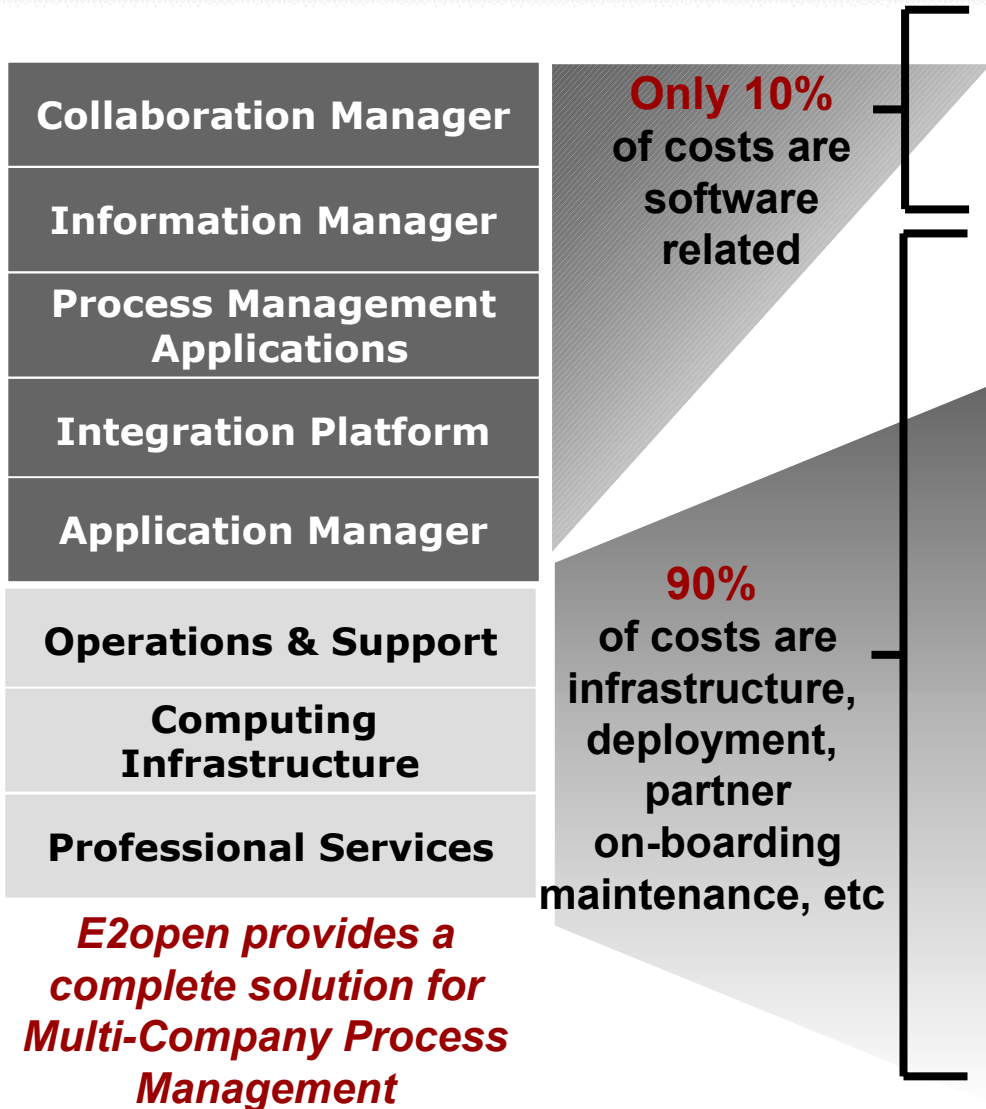


E2open offers Multi-Company Process Management software for companies participating in complex, global multi-tier supply chains

Fully integrated, single source for managing inter-company processes



E2open delivers software as a service to lower the hidden costs of deployment, maintenance, partner on-boarding and change management

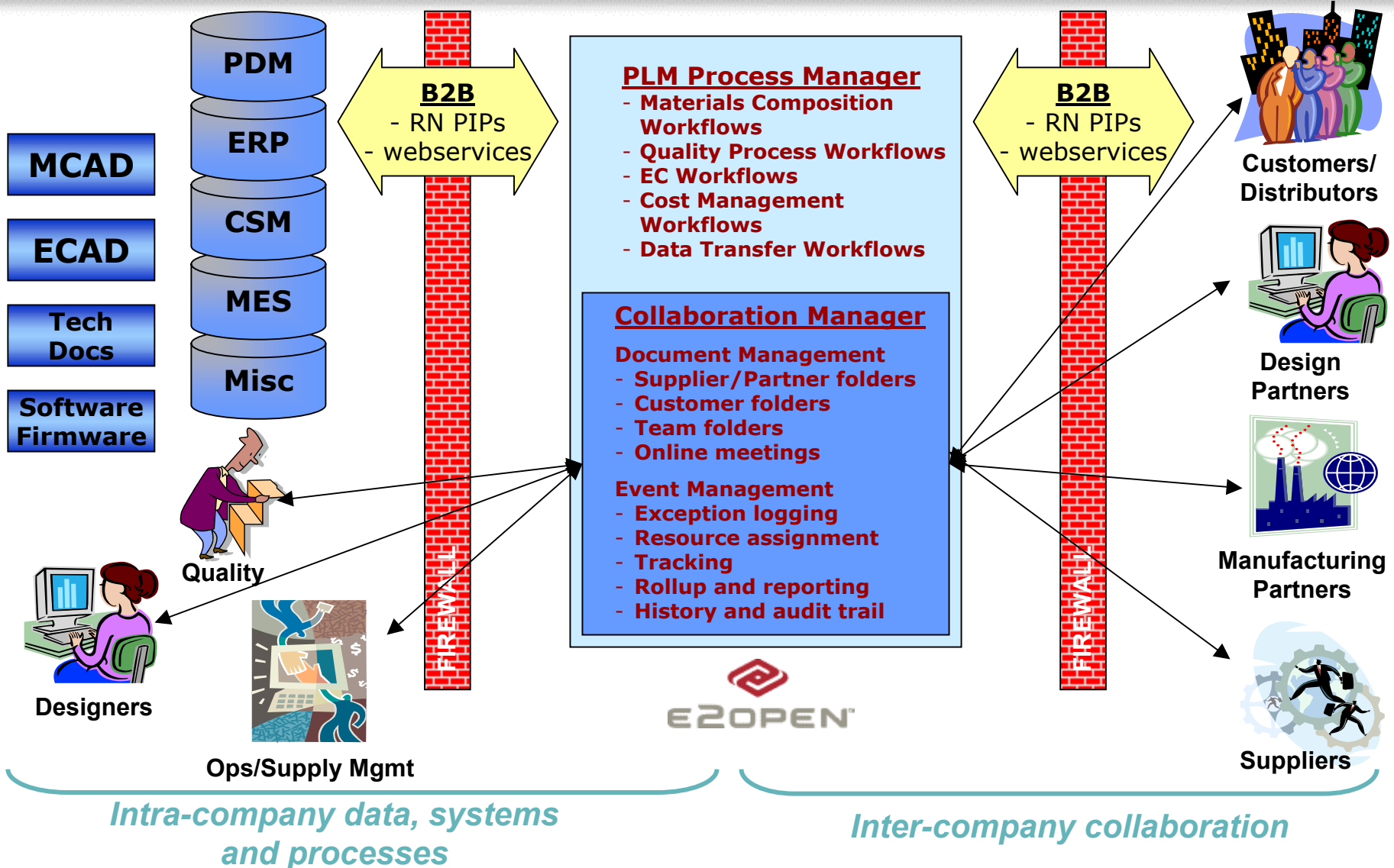


E2open PLM: Enabling Multi-Company Process Management

- **Leverage customers investment in PDM/PLM, ERP, CSM, CRM systems for value chain process optimization**
- **Leverage and extend the customers current investment in supply chain integration infrastructure**
- **Leverage E2open technology**
- **Leverage and support development of related information exchange standards to support value chain integration**
 - i.e. RosettaNet, IPC-PDX
- **Focus on:**
 - Key PLM processes that require multi-company collaboration and data exchange and currently require a high degree of manual support
 - Providing a secure solution for information exchange, both system to system and human collaboration
 - Providing rapid partner on-boarding, profile definition and multi-partner business rule management

Our goal is to provide the means to synchronize and collaborate on PLM processes across disparate systems in the value chain for decreased cost and time to market

E2open PLM Process Manager Solution



Materials Composition Declaration (MCD)

- Data Exchange

- **Business Process Objectives**
 - Establish MCD Baseline at Component and Assembly Level
 - Set up processes to manage MCD throughout lifecycle from new component definition through disassembly/recycling
 - Create and manage processes for Liability Tracking, Exception Management, and Corrective Actions
 - Establish processes with Regulators and Customers
- **IT Objectives**
 - Provide infrastructure and tools for the query and collection of MCD data from supply base
 - Provide tools for MCD analysis and report generation and distribution
 - Reduce the cost, labor and errors associated with manual processes

MCD - Current Reality

- Formal reporting requirements should be defined by the end of 2004
- No single standard format and exchange protocol for MCD queries and responses exists
 - RosettaNet has two alternatives (2A10 vs. 2A13)
 - Email and excel spreadsheets will continue to be a common exchange mechanism, particularly with small to medium sized enterprises
 - PDX 2.0 will provide a BOM level standard for aggregation, but is still in development
- Current approaches do little to support supply chain liability management
- Solutions deployed now will have to provide the flexibility to handle the various formats and protocols, while ensuring support for emerging standards and automated B2B exchange

E2open MCD Solution: Data Exchange

- E2open Integration Platform

- Support for multiple data formats

- JGPSSI excel
 - Compliance Connect excel
 - PDX 2.0 xml (draft)
 - RosettaNet 2A9, 2A10 and 2A13 (draft)

} Conform to JIG requirements

- Support for multiple input/exchange protocols

- Custom API (to back-end systems)
 - SMTP (email)
 - RNIF
 - Other B2B standards

- Data transforms from any format to any format

- Various error checking mechanisms on incoming messages

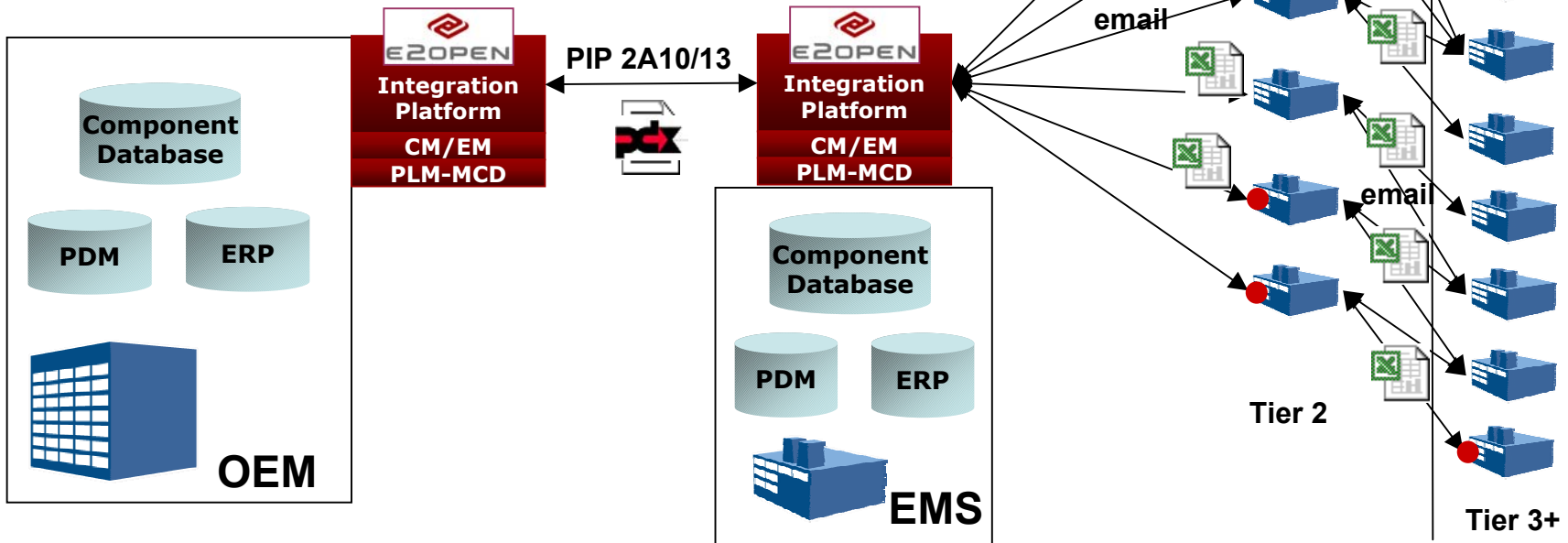
- Security and partner/user authentication

- History and audit trail of transactions

- Business process/trading partner directory

MCD Data Collection through Forms/B2B Interface into E2open Integration Platform

- The E2open Integration Platform provides an Excel or RN interface to sub-tier suppliers and converts incoming supplier data to a common format for integration into clients database for aggregation
- MCD data in the form of RN 2A10/2A13 PIPs or PDX 2.0 files provided to clients customers
- Collaboration Manager used for supplier document management
- Event Manager used to manage issues and exceptions



Summary

- The E2open PLM Process Manager supports key PLM processes that require multi-company collaboration and data exchange and currently require a high degree of manual support
- E2open has the integration platform necessary to securely and reliably transfer materials composition data
 - Providing a secure solution for information exchange, both system to system and human collaboration
 - Provide audit trail for liability management
 - Providing rapid partner on-boarding, profile definition and multi-partner business rule management
 - Provides the flexibility to handle the various formats and protocols, while ensuring support for emerging standards
- The E2open Integration Platform may be the only solution that can address the entire supply chain from large multi-national corporations to small and medium sized enterprise