

Next Steps

July 2005

- Architecture Report available
- RosettaNet Architecture Advisory Committee defines new standards development programs

Aug-Sept 2005

- RosettaNet Foundational Programs begin

Sept 2005: Part II

- EPCglobal US Conference 2005 • 13-15 September
Georgia World Congress Center • Atlanta, Georgia

Get Involved

RosettaNet Foundational Programs

- New standards to be determined: identification numbers, registries, bindings

Centres of Excellence

- On-loan architecture and engineering teams in Malaysia, Philippines and Singapore
- Developing architecture standards to support broad synchronization network capabilities, spanning RosettaNet, EPCglobal and GS1 standards

Resources at the Conference

Session F2: EPC in Logistics (Wed.)

Session F7: SSCC Fundamentals (Wed.)

Session H4: Introduction to GLNs (Thurs.)

Resources after the Conference

RosettaNet website: www.RosettaNet.org

- Partner Interface Processes
- RosettaNet Implementation Guides

GS1 US website: www.gs1us.org

- GTIN Implementation Guide
- GLN Implementation Guide

EPCglobal US website: www.EPCglobalUS.org

- Information on the EPC
- Information on the EPCglobal Network

PLAYBILL

07 JUNE 2005

ROSETTANET

Presenting

Logistics: Proof of Concept

Cast

The Supply Chain

In order of appearance

Roles

Actors

Customer. Acme Corp
Supplier. Sunshine Supplies
Manufacturer. Pacific USB
Freight Forwarder. Triple 8 Freight
Freight Service Speedy Air
Logistics Provider. Chan Logistics

Actors not shown on the stage:

Manufacturer. Softworld
Freight Service. Muthu Trucking
Freight Service. BPL Freight
Freight Forwarder. Fast Airlines

Crew:

Architecture Centre (Singapore), Tools Centre (Philippines),
Engineering Centre (Malaysia), and
RosettaNet Standards Team (United States)

Special Appreciation

RosettaNet Architecture Advisory Committee

Notes

Cast

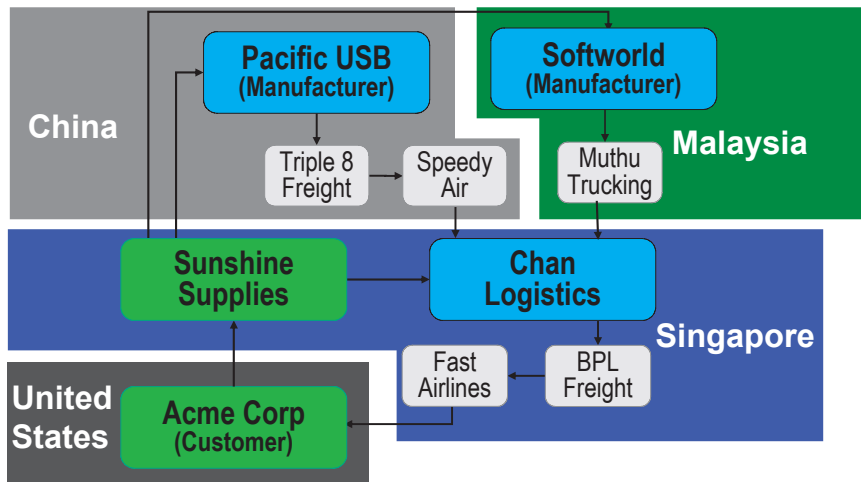
The Network

In order of appearance

Actors	Roles
TPIR Gateway	Transform XML-PDF Message Routing PIP® Message Archive
TPIR Repository	Store/Access TPIR-PIPs and TPIR-PF Forms
Regional Event Registry	EPCglobal Network™ Events
Logistics Provider Repository	PIP Message Archive EPCglobal Network Event Information
Supplier Repository	PIP Message Archive EPCglobal Network Event Information
Product & Partner Info Registry	Partner Location/Contacts Product Descriptions

Setting

Supply Chain Map



Terminology

Repository: Maintains actual artifacts in their electronic form

Gateway: Provides data routing and data transformation services

Radio Frequency Identification (RFID) is a data carrier technology that transmits information via signals in the radio frequency portion of the electromagnetic spectrum

EPCglobal Network Event is any read of an EPCglobal tag

Tags consists of a microchip attached to an antenna; stores EPC

Readers capture the EPC from a tag using radio waves

Electronic Product Codes provide globally unique identification numbers to track pallets, cartons, and serialized items

Information is associated with each code to provide visibility into the supply chain

Subscription is a capability that allows trading partners to electronically request the exact information needed

Auto-Send describes system capability to automatically send notification (content or link) about the new information to all subscribers

Terminology

Partner Interface Process® (PIP®) are specialized system-to-system XML-based dialogs that define business processes between trading partners

Globally Unique Identification Numbers are used to reference information stored in a registry or repository

TPIR: Trading Partner Implementation Requirements

TPIR-PIP: Allows compliant constraints of PIP standards to be expressed in machine-readable XML Schema

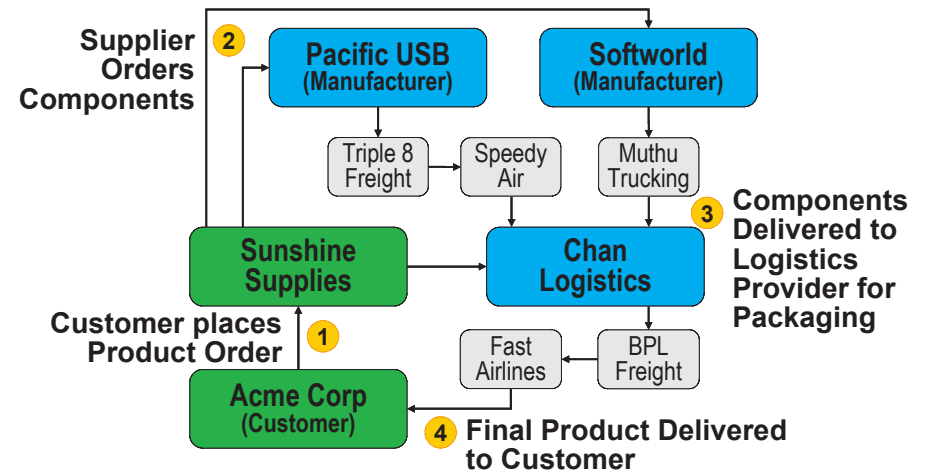
TPIR-PF: Allows PIP XML data to be structured in human-readable PDF format for easy data entry and email-based exchange by Small and Medium Enterprises (SMEs)

TPIR Repository stores the TPIR-PIP XML and the TPIR-PF PDF files for secure community access

TPIR Registry Interface Specification: Specifies interface requirements for posting to and retrieving forms from a standards-based registry

Registry: Maintains meta-data that describe artifacts

Process Flow Supply Chain Map



Act I

Purchase Orders for Big and Small

PART 1

Acme Corp places purchase order with Sunshine Supplies (THE BIG)

PART 2

Sunshine Supplies places purchase order with Pacific USB (THE SMALL)



Act II

Products on the Move

PART 3

Introduction to Identification Numbers and the Network Actors

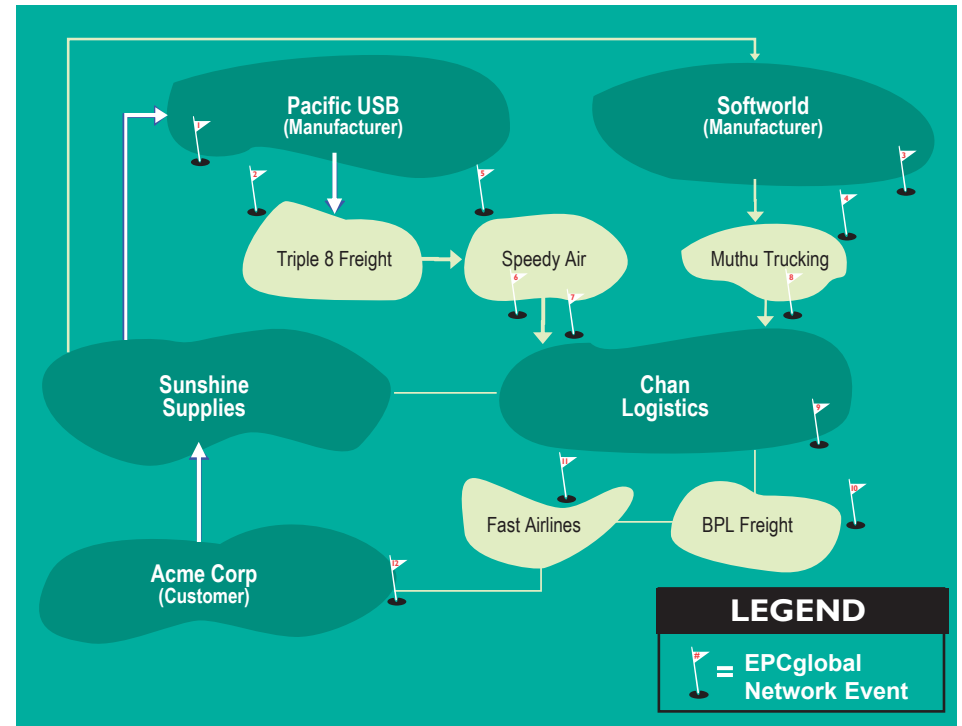
PART 4

Pacific USB and Triple 8 Freight use EPCglobal Network Event to track shipment

PART 5

Speedy Air leverages registry subscription to notify partners about EPCglobal Network Event

On Par with Top Efficiency



Track and trace each EPCglobal Network Event.

Connecting the Global Supply Chain



**Follow the movement of product through the
global supply chain.**

Act III

Network Magic

PART 6

Sunshine Supplies asks:
Where is the Box?

PART 7

Chan Logistics asks:
What is in the Box?

PART 8

Acme Corp asks:
What is known about the Box?

Demonstration Flow

Part	Demonstration Capability
1	Machine-to-Machine Integrated PIP
2	Forms Capability using TPIR Gateway
3	Description of the Network
4	EPCglobal Network Events
5	Subscription Capability
6	Where is the Box?
7	What is in the Box?
8	All information about the Box?

Standards

Logistics Processes and Events

- Request Purchase Order - PIP 3A4
- Notify of Advance Shipment - PIP 3B2
- Request Shipping Order - PIP 3B12
- Notify of Shipping Order Confirmation – PIP 3B13
- Notify of Shipment Documentation - PIP 3B18

Standards

Implementation Standards

- RosettaNet Implementation Framework (RNIF)
- Trading Partner Implementation Requirements for an XML Schema PIP (TPIR-PIP)
- Presentation Format for the form representation of a PIP (TPIR-PF)

Distributed Information Network

- Registry (ebXML)
- Object Naming Service (ONS) (EPCglobal Network)
- Subscription Capability (ebXML registry)
- TPIR-Registry Interface
- Resource Oriented Architecture (ROA API)

RFID Tags and Readers

- EPC Tag Data Standard v1.1 rev. 1.27
- EPCglobal Generation I/Class 0 or Class I

Unique ID Numbers and Referenced Objects

- Global Location Number (GLN)
- Global Trade Item Number® (GTIN®)
- Serial Shipping Container Code (SSCC)
- Electronic Product Code™ (EPC)