

PIP[®] Specification

Cluster 2: Product Information
Segment C: Product Design Information

PIP2C9: Notify of Approved Manufacturer List

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1 Document Management

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1.4 Acknowledgments

This document has been prepared by RosettaNet (<http://www.rosettanel.org/>) from requirements gathered during the Milestone Program and in conformance with the methodology.

1.5 Prerequisites

The audience should be familiar with the RosettaNet User's Guide, "Understanding a PIP Blueprint." This document can be downloaded from the RosettaNet web site at the following address.

<http://www.rosettanel.org>

1.6 Related Documents

- Associated PIP Message Guidelines (included with PIP Blueprint and PIP Specification)
- Associated PIP Message Schemas (included with PIP Specification only)

1.7 Document Version History

Version	Date	Document in Development – Update Information
Released 01.00.00	13 March 2015	Released Version

2 Introduction

A Partner Interface Process™ (PIP) Specification comprises the following three views of the ebusiness PIP model.

1. **Business Operational View (BOV).** Captures the semantics of business data entities and their flow of exchange between roles as they perform business activities. The content of the BOV section is based on the PIP Blueprint document created for RosettaNet's business community.
2. **Functional Service View (FSV).** Specifies the network component services and agents and the interactions necessary to execute PIPs. The FSV includes all of the transaction dialogs in a PIP Protocol. The purpose of the FSV is to specify a PIP Protocol that is systematically derived from the BOV. The two major components within the FSV are the network component design and network component interactions.
3. **Implementation Framework View (IFV).** Specifies the network protocol message formats and communications requirements between peer-protocols supported by network components in the RosettaNet Implementation Framework. These messages are exchanged when software programs execute a PIP; RosettaNet distributes these as XML Message Guidelines.

3 Business Operational View

3.1 Business Process Definition

The "Request Approved Manufacturer List" Partner Interface Process™ (PIP) supports a process in which

1. An Integrator requests the Approved Manufacturer List (AML) information for a product, and
2. The Qualification Owner for that product returns the requested information to the Integrator.

The Integrator initiates the process by sending an AML request to the Qualification Owner. To facilitate communications, the request document includes both query constraint lines and incomplete results lines. After processing the request, the Qualification Owner completes the results lines and returns the information to the requesting party.

The Qualification Owner is the entity responsible for qualifying parts that are approved for manufacture of the product and qualifying suppliers that are approved for acquiring these parts. The Integrator is responsible for the product's manufacture or assembly.

The Integrator may use PIP2C2, "Request Engineering Change", to inform a Qualification Owner of errors in an AML or another reason to change it.

Should this transaction not complete successfully, the requesting partner executes PIP0A1, "Notification of Failure."

3.2 PIP Purpose

This PIP is designed to easily and efficiently communicate AML information about the parts that are approved for a product from engineering to manufacturing. It supports the exchange of mappings from internal part numbers to manufacturer part numbers, where "manufacturer" is loosely defined as the last partner to affect a change to the part. It also supports the mapping of these part numbers to supplier part numbers. The AML solves a variety of problems that impact quality, costing and lead times. Quality is improved by specifying precise definitions of the parts that are approved and the suppliers that are approved to supply them. The AML assists in costing and in planning lead times. The AML provides traceability into the process of part acquisition. The AML also allows the Integrator to respond whether it is able to build the product.

3.3 PIP Business Process Flow Diagram

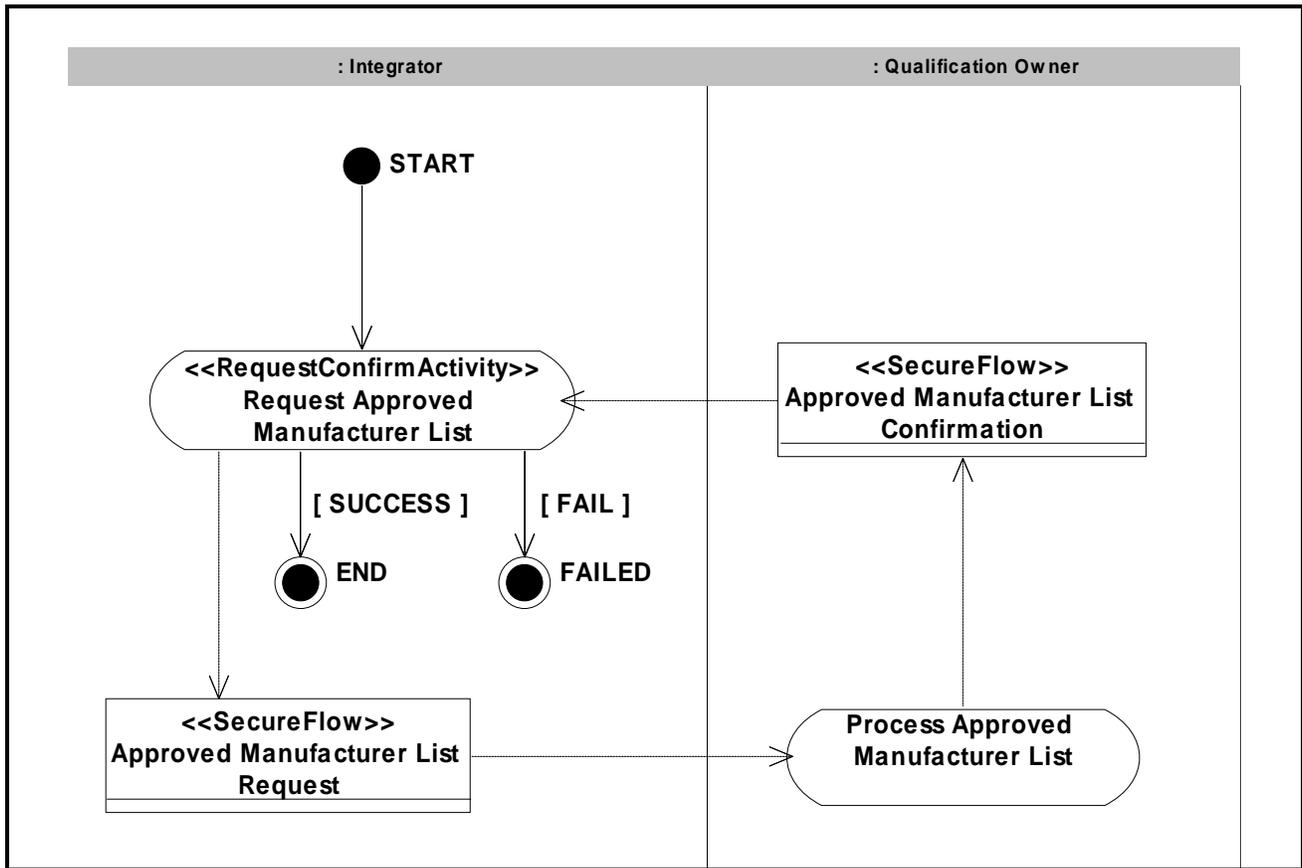


Figure 3-1: Activity Diagram of Request Approved Manufacturer List

3.4 PIP Start State

The start state is comprised of the following conditions:

- Approved Manufacturer List Request Exists.
- TPA Exists.
- Requesting Partner Approved.
- Responding Partner Approved.
- Integrator Authorized.
- Approved Manufacturer List Request Valid.
- Approved Manufacturer List Request Non-Repudiated.

3.5 PIP End States

End states are comprised of one or more conditions:

END

- Acknowledgment of Receipt Exists.
- Seller Authorized.
- Acknowledgment of Receipt Valid.
- Acknowledgment of Receipt Non-Repudiated.
- Approved Manufacturer List Confirmation Exists.
- Approved Manufacturer List Confirmation Valid.
- Approved Manufacturer List Confirmation Non-Repudiated.

FAILED

- Retry Count Exceeded.
- Not SUCCESS.

3.6 Partner Role Descriptions

Table 3-1 describes the partner roles in this PIP.

Table 3-1: Partner Role Descriptions		
Role Name	Role Description	Role Type
Integrator	The organization responsible for the production of the product. Change requests are communicated back to the Qualification Owner.	Functional
Qualification Owner	The organization responsible for the qualification of manufacturers and suppliers of parts for the product. The Qualification Owner defines and maintains the AML for the product.	Organizational

3.7 Business Process Activity Controls

Table 3-2 describes the interaction contract between roles performing business activities in this PIP.

Table 3-2: Business Activity Descriptions		
Role Name	Activity Name	Activity Description
Integrator	Request Approved Manufacturer List	This activity generates and sends a Request Approved Manufacturer List to a Qualification Owner.

Table 3-3 details the security, audit and process controls relating to activities performed in the PIP.

Table 3-3: Business Activity Performance Controls								
Role Name	Activity Name	Acknowledgment of Receipt		Time to Acknowledge Acceptance	Time to Perform	Retry Count	Is Authorization Required?	Non-Repudiation of Origin and Content?
		Non-Repudiation Required?	Time to Acknowledge					
Integrator	Approved Manufacturer List Request	Y	2 hrs	N/A	24 hrs	3	Y	Y

3.7.1 PIP Business Documents

Business Documents are generated and exchanged by roles performing activities in this PIP. Business Documents are listed and defined in Table 3-4, and are generated using RosettaNet Message Guidelines. These Message Guidelines can be downloaded via the Uniform Resource Locator (URL) referenced in Section 1.6, "Related Documents."

Table 3-4: PIP Business Documents	
Business Document	Description
Approved Manufacturer List Request	Allows the sender to request Approved Manufacturer List information for a product. The product being queried can be identified using a Global Trade Item Number (GTIN) or proprietary product identifier.
Approved Manufacturer List Confirmation	Contains Approved Manufacturer List data for a given product. The Approved Manufacturer List specifies manufacturer part numbers for parts from approved manufacturers and approved suppliers for the parts.

3.8 PIP Business Data

3.8.1 Business Data Entities

The business data entities, fundamental business data entities, and global identifying properties can be found in the RosettaNet Business Dictionary using the URL specified in Section 1.6, "Related Documents."

3.9 Business Data Entity Security

There are no security controls specified for this PIP.

4 Functional Service View

The two major components in the FSV are the network component design and possible network component interactions, listed in sections 4.1 and 4.3.

4.1 Network Component Design

A network component design specifies the network components necessary to execute the PIP and the network component collaboration. A network component design is comprised of Agent components and Business Service components that enable roles to perform business activities in a networked environment. Network components collaborate by exchanging business action messages and business signal messages.

4.2 Business Transaction Dialog Specification

Each business activity between roles in the BOV is specified as a business transaction dialog between service network components. A service network component implements protocols that include the service layer, transaction and action layer. A service has “network identity” as a business service. The service has an identity URI that can be registered in directories and used for component communication in a distributed computer system.

The rest of section 4.3 specifies the network component configuration for this PIP. Each figure specifies the message exchange sequence as network components collaborate to execute this PIP. Each table shows the properties for each of the messages exchanged by the interactions in the corresponding figure.

4.3 Network Component Specification

Each network component maps onto a role in the BOV of the PIP model. Table 4-1 specifies the mapping between roles in the BOV and network components in the FSV.

Table 4-1: Network Component Specification		
Network Component in FSV	Classification	Maps to Role in BOV
Integrator Service	Business Service	Integrator
Qualification Owner Service	Business Service	Qualification Owner

4.4 Business Action and Business Signal Specification

Each business action maps onto a Business Document in the BOV of the PIP model. Table 4-2 specifies the mapping between Business Documents in the BOV and business actions in the FSV.

Table 4-2: Business Action – Business Document Mapping	
Business Action in FSV	Maps To Business Document in BOV
Approved Manufacturer List Request Action	Approved Manufacturer List Request
Approved Manufacturer List Confirmation Action	Approved Manufacturer List Confirmation

4.4.1 Request Approved Manufacturer List Dialog: Service-Service

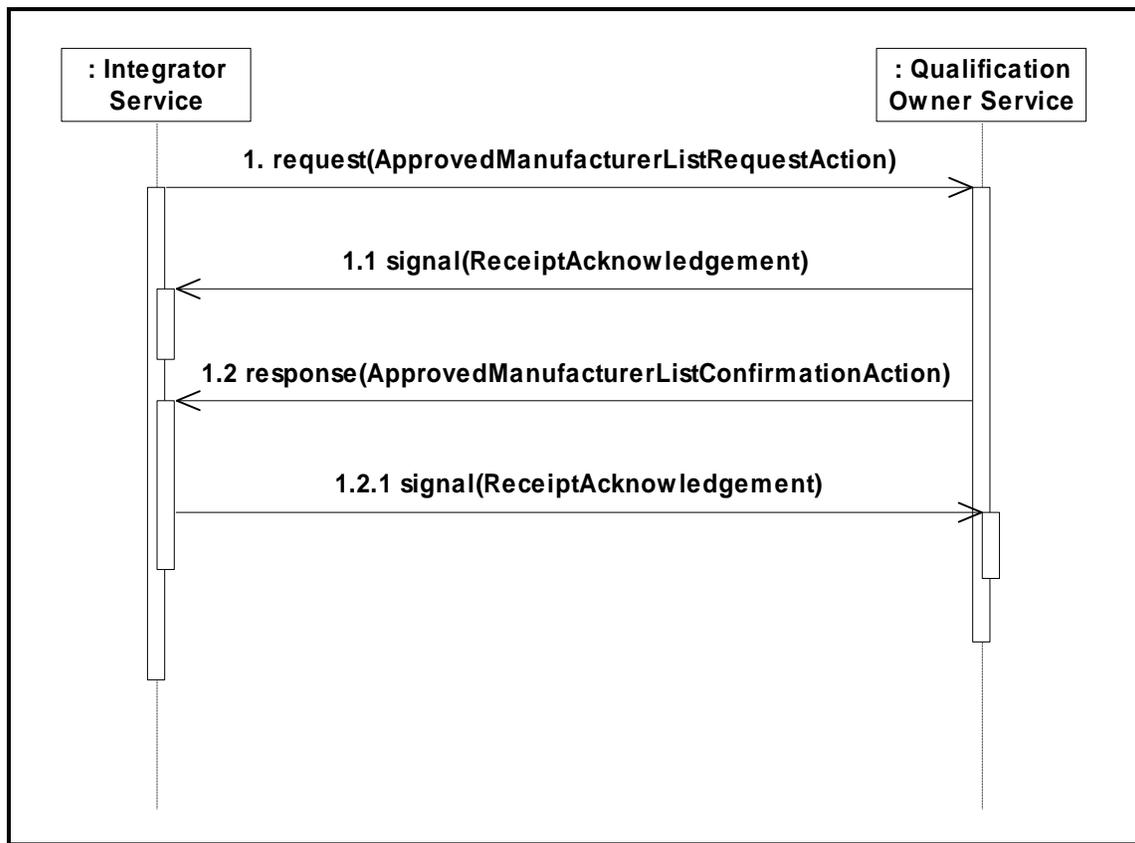


Figure 4-2: Request Approved Manufacturer List Interactions: Service-Service

Table 4-3: Message Exchange Controls - Request Approved Manufacturer List								
#	Name	Time to Acknowledge Receipt Signal	Time to Acknowledge Acceptance Signal	Time to Respond to Action	Included in Time to Perform	Is Authorization Required?	Is Non-Repudiation Required?	Is Secure Transport Required?
1.	Approved Manufacturer List Request Action	2 hrs	N/A	24 hrs	Y	Y	Y	Y
1.1.	Receipt Acknowledgment	N/A	N/A	N/A	Y	Y	Y	Y
1.2.	Approved Manufacturer List Confirmation Action	2 hrs	N/A	N/A	Y	Y	Y	Y
1.2.1.	Receipt Acknowledgment	N/A	N/A	N/A	N	Y	Y	Y

5 Implementation Framework View

The tables in Section 5 specify the business messages and their communications requirements for executing this PIP.

5.1 Request Approved Manufacturer List Dialog: Service-Service

Table 5-1: Business Message and Communications Specification			
#	Business Message Guideline	Digital Signature Required?	SSL¹ Required?
1.	Approved Manufacturer List Request Guideline	Y	Y
1.1.	Receipt Acknowledgment Guideline	Y	Y
1.2.	Approved Manufacturer List Confirmation Guideline	Y	Y
1.2.1.	Receipt Acknowledgment Guideline	Y	Y

¹ Secure Socket Layer