

Description of Partner Interface Process® for 3A4

Validated 11.15.00

Specification Information	
Name	Request Purchase Order
Cluster	Order Management
Segment	Quote and Order Entry
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1 Document Management

1.1 Legal Disclaimer

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1.4 Acknowledgments

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

Cisco Systems	SBC Business Marketing
Bellsouth Communication Systems	Sterling Commerce
Intel	World Wide Technology (WWT)

1.5 Related Documents

- Associated PIP Message Schemas (included within the PIP Specification package only)
- Description of PIP3A4 Message
- Message Structure
- XML instance of ebBPSS for PIP 3A4

1.6 Document Version History

<u>Version</u>	<u>Date</u>	<u>Description</u>
Validated 11.00.00	02 August 2005	RosettaNet Automated Enablement (RAE) Milestone Program
Validated 11.01.00	08 November 2005	Service Contract Information Management (SCIM) Milestone Program
Validated 11.10.00	29 May 2006	Service Contract Information Management (SCIM) Milestone Program
Validated 11.11.00	18 July 2006	RosettaNet Automated Enablement (RAE) Milestone Program
Validated 11.12.00	19 August 2008	RosettaNet PIP Maintenance
Validated 11.13.00	30 July 2009	Q3-2009 Maintenance Process
Validated 11.14.00	9 February 2010	MCC Foundational Program
Validated 11.15.00	9 February 2010	Updated Version

1.7 Document Structure

A Partner Interface Process (PIP) Specification is comprised of the following two parts:

1. **Business Process.** Captures the semantics of the business process and the flow of the message exchange between roles as they perform business activities.
2. **Network and Implementation Specification.** Specifies the network protocol message formats and communications requirements between peer-protocols supported by network components in the RosettaNet Implementation Framework.

2 Business Process

2.1 Business Process Definition

The "Request Purchase Order" Partner Interface Process™ (PIP) enables a buyer to issue a purchase order, and a provider to acknowledge, at the line level, if the order is accepted, rejected, or pending.

The provider's acknowledgment may also include related information about delivery expectations.

When a provider acknowledges that the status of a purchase order product line item is "pending," the provider may later use PIP3A7, "Notify Of Purchase Order Acknowledgment" to notify the buyer when the product line item is either accepted or rejected.

2.1.1 Executive Summary

Request Purchase Order standardizes the purchase order request and confirmation process by defining a common vocabulary for transmission of purchase order information. The value propositions of this initiative are:

- Standards based purchase order information increases trading partners (provider and buyer) business efficiency.
- Standards based purchase order information decreases IT support resources and overhead required to assure data integrity.
- Standards based purchase order information enables on demand problem resolution between the trading partners.
- Standards based purchase order information enables rapid new partner setup in B2B environment.
- Standards based purchase order information can be used as a quantifiable metric for customer satisfaction.

2.1.2 Business Process Description

The "Request Purchase Order" Partner Interface Process (PIP) supports the process to send purchase order information to a trading partner.

The process of issuing a purchase order typically occurs after:

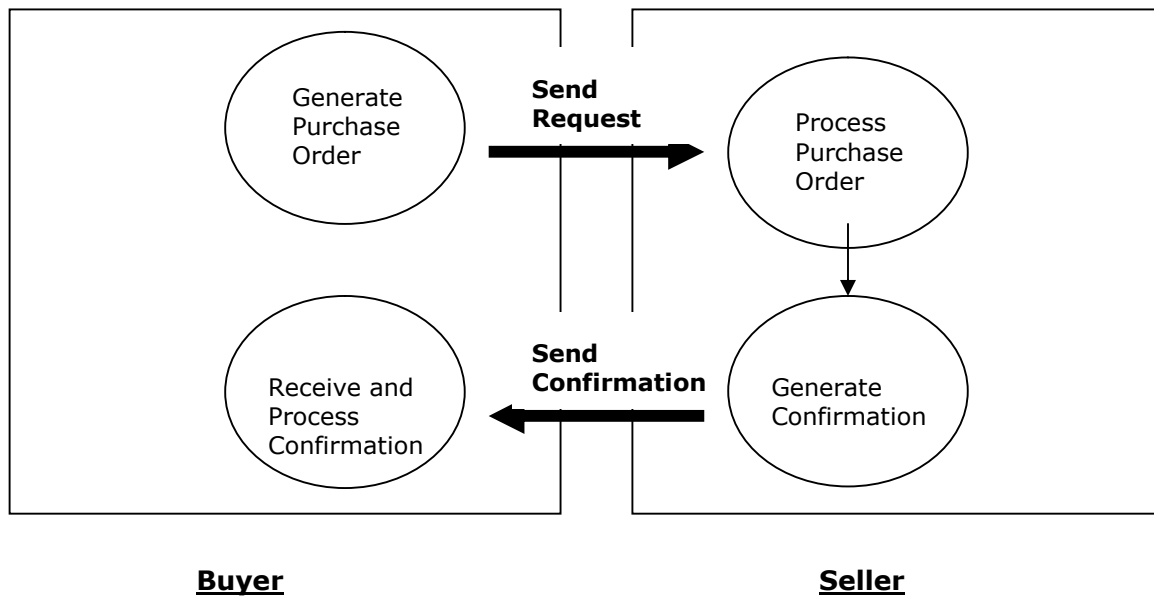
- Checking for price and availability
- Requesting quotes
- Transferring shopping carts

The process of issuing a purchase order may be followed by:

- Changing the purchase order
- Canceling the purchase order
- Querying for purchase order status
- Distributing purchase order status

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

2.1.3 Business Process Context Diagram



- Prior to making any purchase order request, buyer can check for products price and availability using PIP 3A2, and request for quotation using PIP 3A1.
- Purchase Order Request send from buyer to seller, using PIP 3A4.
- Seller needs to acknowledge and confirm to the buyer for the acceptance or rejection of a pending line item in the purchase order.
- In the event where the seller has any counter proposal on the purchase order, the seller needs to change and notify the buyer, using PIP 3A7.

Figure 1: High-level Context Diagram

2.2 PIP Scope Description

This PIP enables a buyer to issue a purchase order and obtain a quick response from the provider that acknowledges which of the purchase order product line items are accepted, rejected, or pending.

2.2.1 Business Process Scope Diagram

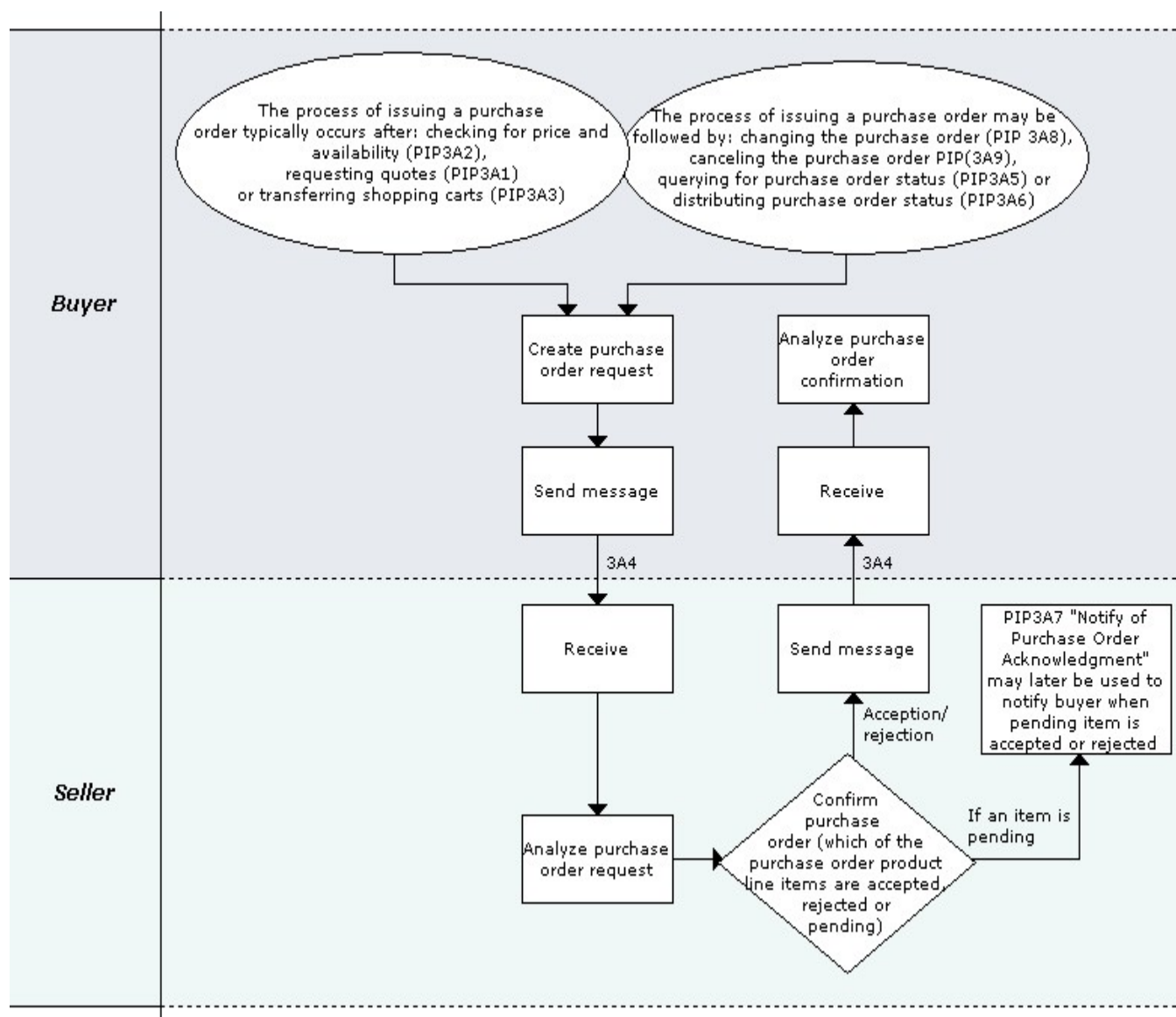


Figure 2: Business Process Scope Diagram

2.3 PIP Business Documents

Business Documents are generated and exchanged by roles performing activities in this PIP. Business Documents are listed and defined in Table 1.

Table 1: PIP Business Documents	
Business Document	Description
Purchase Order Request	A request to accept a purchase order for fulfillment.
Purchase Order Confirmation	Formally confirms the status of line item(s) in a Purchase Order. A Purchase Order line item may have one of the following states: accepted, rejected, or pending.

2.4 PIP Business Process Flow Diagram

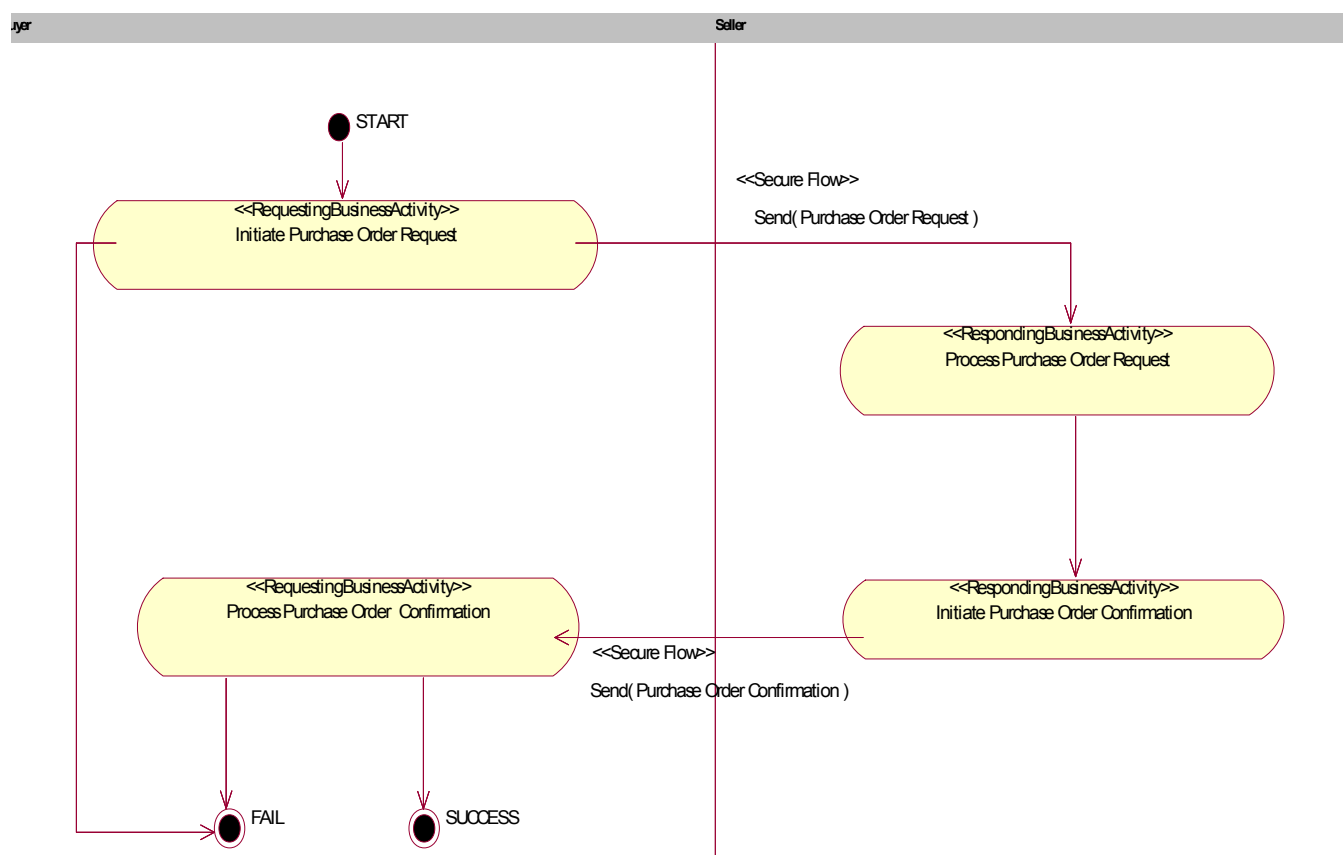


Figure 3: Activity Diagram of Request Purchase Order

2.5 PIP Start State

The start state is comprised of the following condition(s):

Table 2: PIP Start State							
	Approved	Exist		Valid	Non-Repudiated	Retry Count	Authorized
		Party	In Backend system				
TPA	✓		✓				
Sending Partner	✓	✓					✓
Receiving Partner	✓	✓					
Business Document (Purchase Order Request)			✓	✓	✓		

2.6 PIP End States

The end state is comprised of the following condition(s):

Table 3: PIP End State							
	Approved	Exist		Valid	Non-Repudiated	Retry Count	Authorized
		Party	In Backend system				
Acknowledgment of Receipt Receiving Partner			✓	✓	✓		
							✓

The PIP failure state is comprised of one or more of the following condition(s):

Table 4: PIP Failure State		
	NO	Exceeded
Success	✓	
Retry Count		✓

2.7 Partner Role Descriptions

Table 5 describes the partner roles in this PIP.

Table 5: Partner Role Descriptions	
Role Name	Role Description
Buyer	An employee or organization that buys products for a partner type in the supply chain.
Seller	An organization that sells products to partners in the supply chain.

2.8 Business Process Activity Controls

Table 6 describes the interaction between roles performing business activities in this PIP.

Table 6: Business Activity Descriptions		
Role Name	Activity Name	Activity Description
Buyer	Initiate Purchase Order Request	This activity issues a Purchase Order to a Seller.
Seller	Initiate Purchase Order Confirmation	The Seller acknowledges, at the line level, if the Purchase Order is accepted, rejected, or pending.

Table 7 details the security, audit and process controls relating to activities performed in the PIP.

Table 7: Business Activity Performance Controls							
Role Name	Activity Name	Acknowledgment of Receipt		Time to Perform	Retry Count	Is Authorization Required?	Non-Repudiation of Origin and Content?
		Non-Repudiation Required?	Time to Acknowledge				
Buyer	Initiate Purchase Order Request	Y	2 hrs	24 hrs	3	Y	Y
Seller	Initiate Purchase Order Confirmation	Y	2 hrs	24 hrs	3	Y	Y

3 Network and Implementation Specification

Each network component maps into a role of the PIP model. Table 8 specifies the mapping between roles and network components.

Table 8: Network Component Specification		
Network Component	Classification	Maps to Role in Business Process
Buyer Service	Business Service	Buyer
Seller Service	Business Service	Seller

3.1 Business Action and Business Signal Specification

Each business action maps to a Business Document of the PIP model. Table 9 specifies the mapping between Business Documents and business actions.

Table 9: Business Action – Business Document Mapping		
Business Action	Business Document	Document Function
Purchase Order Request Action	Purchase Order Request	Request
Purchase Order Confirmation Action	Purchase Order Confirmation	Respond

3.2 Business Transaction Dialog Specification

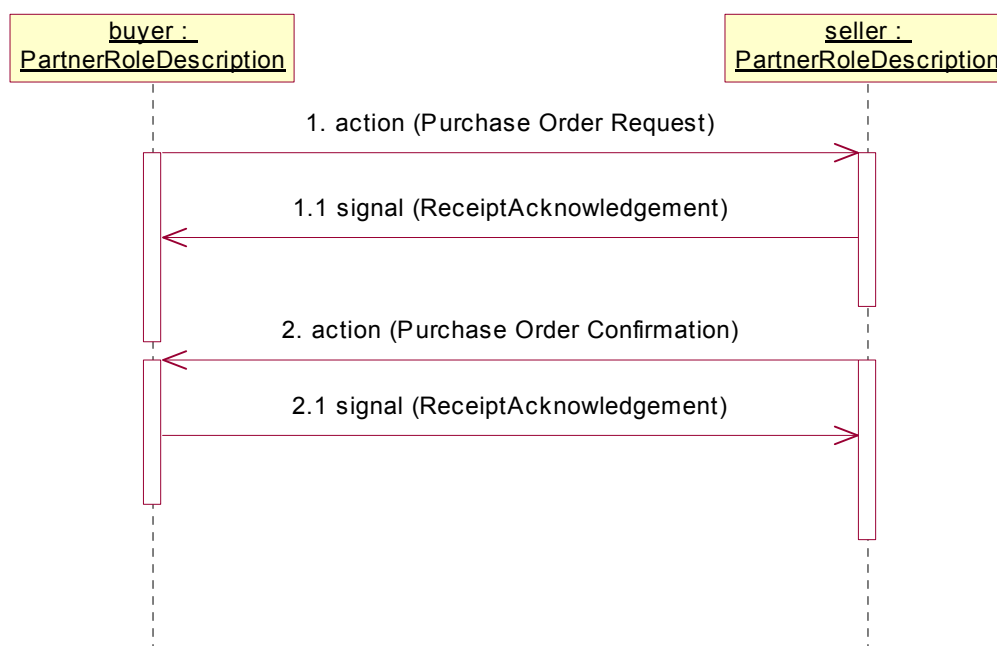


Figure 4: Sequence Diagram of Request Purchase Order

3.2.1 Message Exchange Controls**Table 10: Message Exchange Control**

#	Name	Time to Acknowledge Receipt Signal	Time to Respond to Action	Included in Time to Perform	Is Authorization Required?	Is Non-Repudiation Required?	Is Secure Transport Required?
1.	Purchase Order Request Action	2 hrs	N/A	24 hrs	Y	Y	Y
1.1.	Receipt Acknowledgment	N/A	N/A	N/A	Y	Y	Y
2.	Purchase Order Confirmation Action	2 hrs	N/A	N/A	Y	Y	Y
2.1.	Receipt Acknowledgment	N/A	N/A	N/A	N	Y	Y

3.2.2 Communications Specification**Table 11: Dialog: Service-Service**

#	Business Message	Digital Signature Required?	SSL Required?
1.	Purchase Order Request	Y	Y
1.1.	Receipt Acknowledgment	Y	Y
2.	Purchase Order Confirmation	Y	Y
2.1.	Receipt Acknowledgment	Y	Y