

# Description of Partner Interface Process<sup>®</sup> for 2C8

Released 11.00.00

Specification Information	
<b>Name</b>	Notify of Bill Of Material
<b>Cluster</b>	Product Introduction
<b>Segment</b>	Engineering Change Management
<b>Publication Date</b>	16 May 2012
<b>Version Identifier</b>	R11.00

# Table of Contents

1	Document Management.....	4
1.1	Legal Disclaimer.....	4
1.2	Copyright.....	4
1.3	Trademarks.....	4
1.4	Acknowledgments .....	4
1.5	Related Documents .....	4
1.6	Document Version History .....	4
1.7	Document Structure .....	4
2	Business Process .....	5
2.1	Business Process Definition .....	5
2.1.1	Executive Summary.....	5
2.2	PIP Business Document.....	6
2.3	PIP Business Process Flow Diagram .....	6
2.4	PIP Start State.....	7
2.5	PIP End States .....	7
2.6	Partner Role Descriptions .....	8
2.7	Business Process Activity Controls .....	8
3	Network and Implementation Specification .....	9
3.1	Business Action and Business Signal Specifications.....	9
3.2	Business Transaction Dialog Specification.....	9
3.2.1	Message Exchange Controls .....	10
3.2.2	Communications Specification .....	10

## List of Figures:

Figure 1: Activity Diagram of 2C8 .....	6
Figure 2: Sequence Diagram of 2C8.....	9

## List of Tables:

Table 1: PIP Business Document .....	6
Table 2: PIP Start State.....	7
Table 3: PIP End State .....	7
Table 4: PIP Failure State .....	7
Table 5: Partner Role Description .....	8
Table 6: Business Activity Description .....	8
Table 7: Business Activity Performance Control .....	8
Table 8: Network Component Specification .....	9
Table 9: Business Action – Business Document Mapping.....	9
Table 10: Message Exchange Control .....	10
Table 11: Dialog: Service-Service.....	10

# 1 Document Management

## 1.1 Legal Disclaimer

RosettaNet™, its members, officers, directors, employees, or agents shall not be liable for any injury, loss, damages, financial or otherwise, arising from, related to, or caused by the use of this document or the specifications herein, as well as associated guidelines and schemas. The use of said specifications shall constitute your express consent to the foregoing exculpation.

## 1.2 Copyright

©2012 RosettaNet. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. Printed in the United States of America.

## 1.3 Trademarks

RosettaNet, Partner Interface Process, PIP and the RosettaNet logo are trademarks or registered trademarks of "RosettaNet," a non-profit organization. All other product names and company logos mentioned herein are the trademarks of their respective owners. In the best effort, all terms mentioned in this document that are known to be trademarks or registered trademarks have been appropriately recognized in the first occurrence of the term.

## 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.

## 1.5 Related Documents

- Associated PIP Message Schemas (included within the PIP Specification package only)
- Messages Structure
- XML instance of ebXML BPSS for PIP 2C8

## 1.6 Document Version History

<u>Version</u>	<u>Date</u>	<u>Description</u>
Released 11.00.00	16 May 2012	Set to Released

## 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 "Notify of Bill Of Material" Partner Interface Process™ (PIP) supports a process in which a Design Owner shares Bill Of Material (BOM) information for a product with an Integrator. The Design Owner is the entity responsible for the design of the product and the Integrator is responsible for its manufacture or assembly. The Integrator may use PIP2C2, "Request Engineering Change", to inform a Design Owner of errors in a BOM or another reason to change it. Should this transaction not complete successfully, the requesting partner executes PIP0A1, "Notification of Failure."

#### **2.1.1 Executive Summary**

This PIP is designed to easily and efficiently communicate BOM information about the parts that go into a product from engineering to manufacturing. It solves a variety of problems that impact the quality, availability, cost, performance and evolution of the product. Product quality is improved by reducing the occurrence of mismatched materials. Better communication of the materials required enables the manufacturer to have the parts available, improving the availability of the product. Support for regional buying, where equivalent materials need to be sourced in different regions worldwide, also enhances availability. Greater visibility of materials across multiple products allows for greater reuse and economies in purchasing. As the product evolves, changes to the BOM can be communicated efficiently.

## 2.2 PIP Business Document

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

Table 1: PIP Business Document	
Business Document	Description
Bill Of Material Notification	Contains Bill Of Material data for a given product. The Bill Of Material specifies each component part, listing quantities, serial number requirements and potential alternate parts.

## 2.3 PIP Business Process Flow Diagram

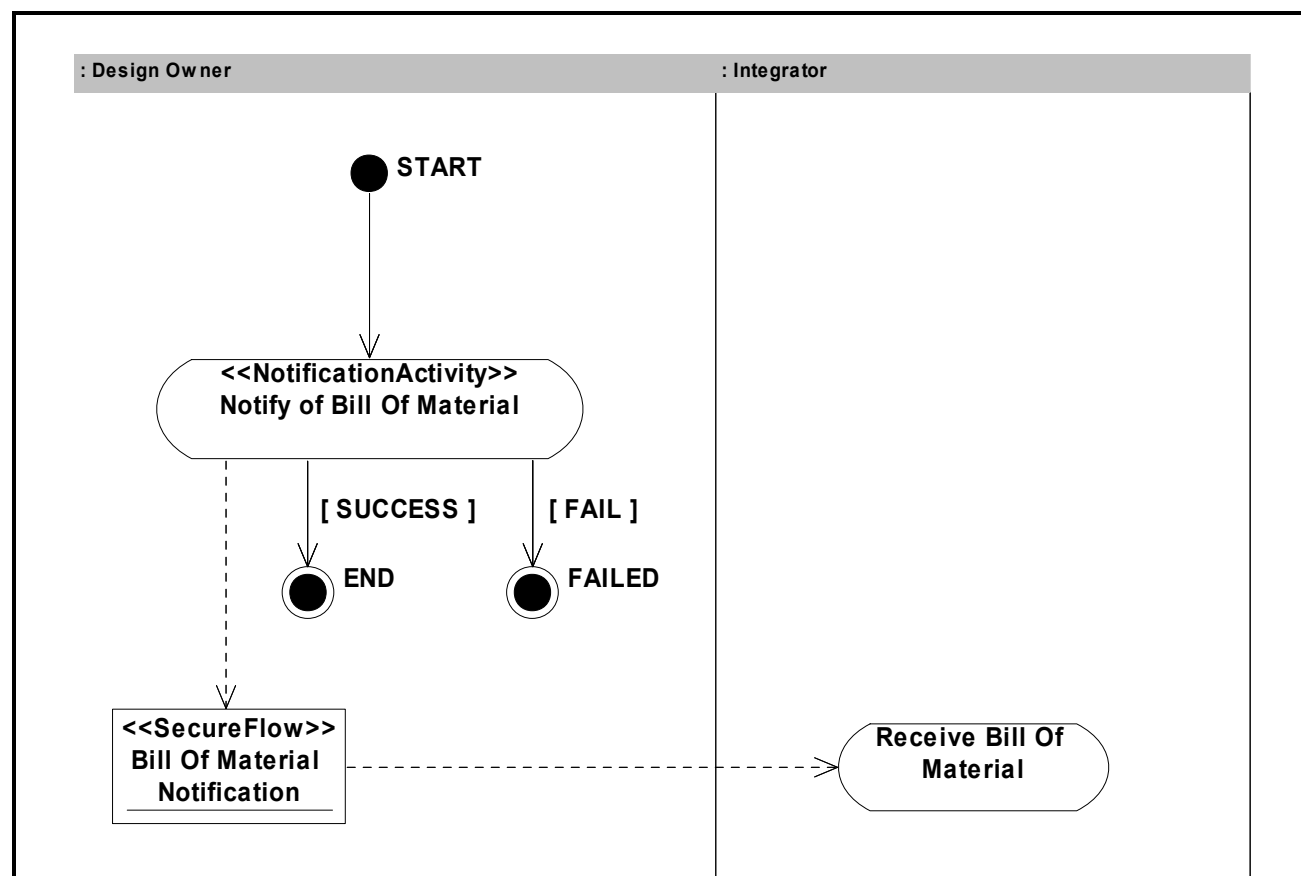


Figure 1: Activity Diagram of 2C8

## 2.4 PIP Start State

The start state is comprised of the following conditions:

Table 2: PIP Start State							
	Approved	Exist		Valid	Non-Repudiated	Retry Count	Authorized
		Party	In Backend System				
TPA	✓		✓				
Sending Partner		✓		✓			
Receiving Partner		✓					
Business Document			✓	✓			

## 2.5 PIP End States

The end state is comprised of the following conditions:

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 conditions:

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

## 2.6 Partner Role Descriptions

Table 5 describes the partner roles in this PIP.

<b>Table 5: Partner Role Description</b>	
<b>Role Name</b>	<b>Role Description</b>
Design Owner	The organization responsible for the design of the product. The Design Owner defines and maintains the BOM for the product.
Integrator	The organization responsible for the production of the product, as defined by the BOM. Change requests are communicated back to the Design Owner.

## 2.7 Business Process Activity Controls

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

<b>Table 6: Business Activity Description</b>		
<b>Role Name</b>	<b>Activity Name</b>	<b>Activity Description</b>
Design Owner	Notify of Bill Of Material	A Design Owner sends a Bill Of Material Notification business document to an Integrator.

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

<b>Table 7: Business Activity Performance Control</b>							
<b>Role Name</b>	<b>Activity Name</b>	<b>Acknowledgment of Receipt</b>		<b>Time to Perform</b>	<b>Retry Count</b>	<b>Is Authorization Required?</b>	<b>Non-Repudiation of Origin and Content?</b>
		<b>Non-Repudiation Required?</b>	<b>Time to Acknowledge</b>				
Design Owner	Notify of Bill Of Material	N	2hrs	N/A	3	N	N



### 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
Design Owner Service	Business Service	Design Owner
Integrator Service	Business Service	Integrator

#### 3.1 Business Action and Business Signal Specifications

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
Bill Of Material Notification Action	Bill Of Material Notification	Request

#### 3.2 Business Transaction Dialog Specification

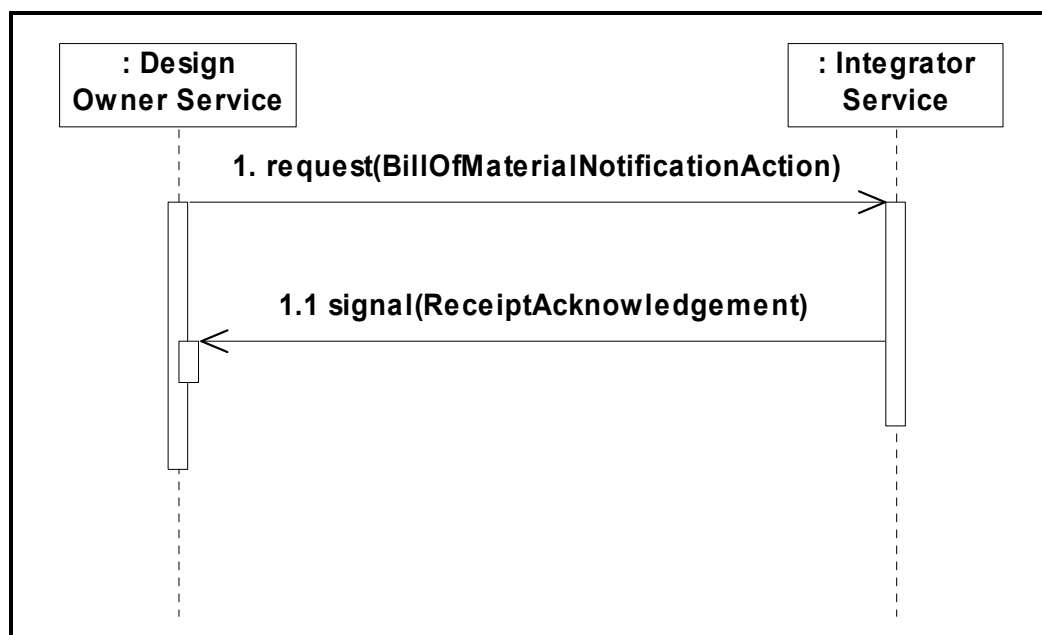


Figure 2: Sequence Diagram of 2C8

**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.	Bill Of Material Notification	2hrs	N/A	N/A	N	N	Y
1.1.	Receipt Acknowledgment	N/A	N/A	N/A	N	N	Y

Note: All time parameters are defined as (hrs or mins), i.e. 2 hrs

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

#	Business Message	Digital Signature Required?	SSL Required?
1.	Bill Of Material Notification	Y	Y
1.1.	Receipt Acknowledgment	Y	Y