



Usage

papiNet Standard - Version 2.31

Documentation

**Global Standard for the Paper and Forest
Products Supply Chain**

January 2009

Production Release

Usage

papiNet Standard - Version 2.31

Copyright

Copyright 2000 – 2009 papiNet G.I.E (“papiNet”), International Digital Enterprise Alliance, Inc. (“IDEAlliance”), and American Forest & Paper Association, Inc. (“AF&PA”), collectively “Copyright Owner”. All rights reserved by the Copyright Owner under the laws of the United States, Belgium, the European Economic Community, and all states, domestic and foreign. This document may be downloaded and copied provided that all copies retain and display the copyright and any other proprietary notices contained in this document. This document may not be sold, modified, edited, or taken out of context such that it creates a false or misleading statement or impression as to the purpose or use of the papiNet specification, which is an open standard. Use of this Standard, in accord with the foregoing limited permission, shall not create for the user any rights in or to the copyright, which rights are exclusively reserved to the Copyright Owner.

papiNet (formerly known as the European Paper Consortium for e-business - EPC), IDEAlliance (formerly known as the Graphic Communications Association - GCA), the parent organisation of IDEAlliance the Printing Industries of America (PIA), the American Forest and Paper Association (AF&PA), and the members of the papiNet Working Group (collectively and individually, "Presenters") make no representations or warranties, express or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, title, or non-infringement. The presenters do not make any representation or warranty that the contents of this document are free from error, suitable for any purpose of any user, or that implementation of such contents will not infringe any third party patents, copyrights, trademarks or other rights. By making use of this document, the user assumes all risks and waives all claims against Presenters.

In no event shall Presenters be liable to user (or other person) for direct, indirect, special or consequential damages arising from or related to any use of this document, including, without limitation, lost profits, business interruption, loss of programs, or other data on your information handling system even if Presenters are expressly advised of the possibility of such damages.

Use of Documents in papiNet Implementations

Documents may be used as templates for a papiNet implementation. The Presenters grant the right to modify and edit them to fit an actual

Usage

papiNet Standard - Version 2.31

implementation project provided all copies display the copyright and any other proprietary notices contained in this document. Such modified documents must not be distributed beyond the trading partners implementing or maintaining a papiNet connection.

Additional Copyright Information

Additional copyrights may be referenced throughout this document in the appropriate section.

Usage

papiNet Standard - Version 2.31

Table of Contents

| | |
|---|----|
| Copyright | 2 |
| Use of Documents in papiNet Implementations | 2 |
| Additional Copyright Information | 3 |
| Table of Contents | 4 |
| Usage Documentation | 5 |
| An Overview of the Usage Message | 5 |
| The Scope of the Usage Message | 5 |
| Message Types | 5 |
| Business Rules for Usage | 5 |
| Additional Information for Usage Message | 7 |
| Usage Structure | 8 |
| Understanding the Diagrams and Content | 8 |
| Usage Root Element | 11 |
| Usage | 11 |
| Primary Elements | 13 |
| UsageHeader | 13 |
| UsageListItem | 15 |
| UsageSummary | 16 |
| Usage Business Scenarios | 17 |
| Usage Scenario Listing | 17 |
| Scenario A | 17 |
| Scenario B | 18 |
| Scenario C | 19 |
| Scenario D | 22 |
| Scenario E | 26 |
| Scenario F | 28 |
| Scenario G | 33 |
| Scenario H | 34 |

Usage

papiNet Standard - Version 2.31

Usage Documentation

An Overview of the Usage Message

The Usage message is used to notify a supplier or buyer that material has been consumed within the end users manufacturing process. The Usage message can be used to support different managed inventory processes such as vendor-managed inventory and inventory replenishment. It can also be used to support an invoicing-on-usage arrangement. The Usage message describes the product and the amount of product consumed. It may contain either detail or aggregated information of the physical items consumed. Within the supply chain process, this message can be used to help monitor physical inventory.

Prior to implementing a Usage message it is assumed that the parties involved have already opened a dialogue and a collaborative agreement has been reached. Such an agreement would include the frequency of messages, the point in the manufacturing process at which the product is considered consumed, content detail, units of measure, and how invoicing should be done.

The Scope of the Usage Message

The Usage message specifies product consumed during the end users manufacturing process. Any inventory adjustments that are a result of something other than the manufacturing process (e.g. - damage, returned stock, claims, etc.) must be managed using other business processes and messages, such as the InventoryChange message.

Usage information can be listed as an aggregated amount or in detail. An aggregated amount might be used when usage reporting is done on a monthly basis where only summarized information needs to be reported. Detail usage can be reported when itemized consumption should be reported.

Message Types

This e-business document has no special types associated with it.

Business Rules for Usage

General Business Rules

The following table lists the business rules that apply to a Usage Message.

| Identifier | Business Rule |
|------------|--|
| USG001 | Each usage line item detail must contain either an aggregated usage line item detail, or one or more itemized usage line item details. |

Usage

papiNet Standard - Version 2.31

| Identifier | Business Rule |
|---------------|---|
| USG002 | Each aggregated usage line item must contain a quantity specifying the amount of product consumed. |
| USG003 | Each aggregated usage line item must contain Product. |
| USG004 | Each usage line item detail must specify a usage status that identifies the item state after consumption. |
| USG005 | Each usage line item detail must specify an Identifier that relates to the product consumed. An ItemType attribute qualifies which type of an item is identified (e.g. ReelItem) |
| USG006 | Each usage message must contain a usage summary specifying the total number of line items. and total quantities used. |
| USG007 | Each usage summary may contain the total quantities used. |
| USG008 | <p>If the usage message is to be sent to a supplier, it can only include consumption of product from that supplier.</p> <ul style="list-style-type: none"> • There is only one SupplierParty per message, so if there were more than one supplier for the usage reporting, there would be separate messages. |
| USG009 | If the reporting party wants to cancel a previously sent usage message it can do so by resending the message with a usage status type of cancelled. The 'cancel' message must reference the original usage number in the header reference. |
| USG010 | If the reporting party wants to replace a previously sent usage message it can do so by sending a new message with a usage status type of replaced. The 'replace' message must reference the original usage number in the header reference. |

Usage

papiNet Standard - Version 2.31

| Identifier | Business Rule |
|---------------|--|
| USG011 | InformationalQuantity may be used to report aggregate spoilage, e.g. Waste = "MakeReady". |
| USG012 | Paper Caused Web Breaks may be reported in aggregate at the usage line item and in detail at the usage line item detail level. |

Additional Information for Usage Message

Aggregated consumption is reported as a total quantity of a product consumed or, itemised consumption where individual item identifiers identify individual items consumed in whole or in part.

Prior to physically consuming the item, consumption is assumed to be for the whole item, for example if the message is triggered at a stripping station.

After physically consuming the item, consumption can be reported in more detail.

- full reel consumed
- part of reel consumed (weight?)
- part of reel consumed and rest unusable (weight?)
- press rejected

The trigger point that causes the message to be generated must have been agreed in the Trading Partner Agreement. For example, for paper reels, trigger points in the process could be as a reel is:

- Brought into the warehouse
- Pulled out of the warehouse
- Brought in stripping
- In lay down
- Loaded on reel arm
- Consumed in press

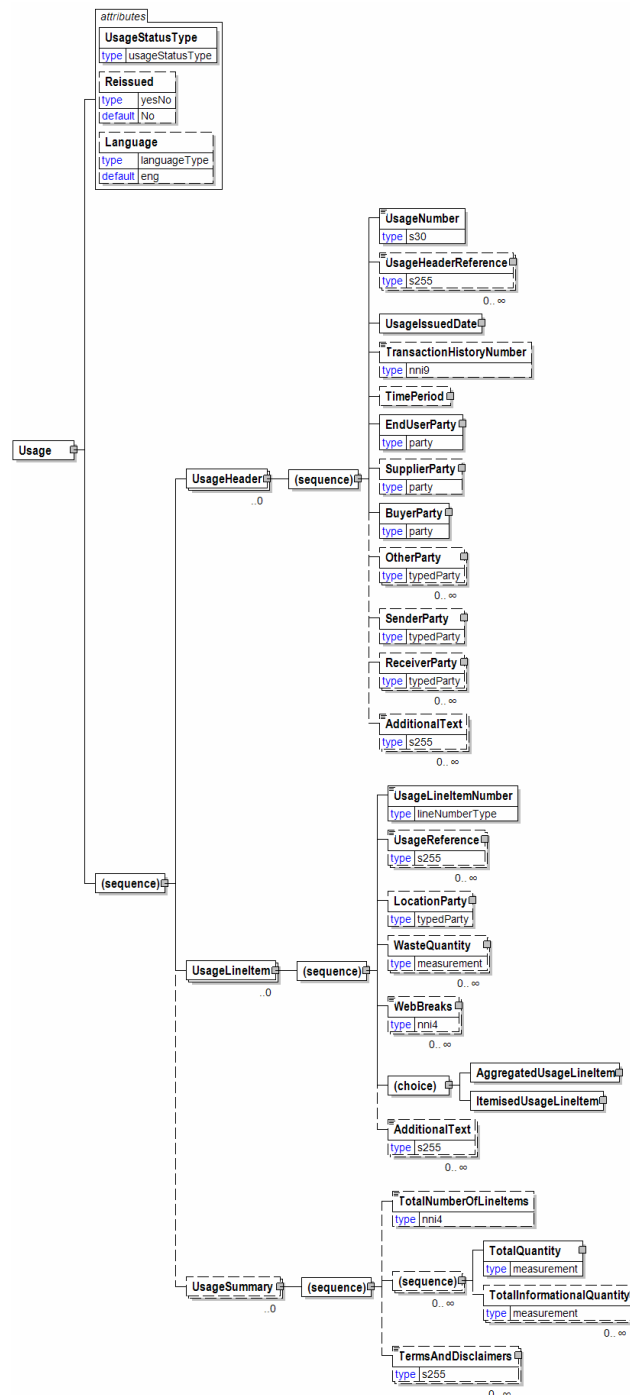
Any inventory reduction that is not created by product usage must be reflected in the Inventory Change message.

Each usage message may reference a specific job or title. The information is contained in UsageHeaderReference. Sub parts of the job or title can be referenced at the UsageReference element in the body of the message. Any attributes populated in the UsageHeaderReference that are again populated in the UsageReference at the line item level are overridden by the reference at the line item level.

Usage

papiNet Standard - Version 2.31

Usage Structure



Understanding the Diagrams and Content

This section provides a graphical view of the schema structures, a discussion of the item's children. You can find additional information about papiNet and the standard at www.papiNet.org.

Usage

papiNet Standard - Version 2.31

The graphics contain content model indicators, cardinality indicators, and data type information.

Associated with each graphic are the definitions for the parent item and any associated child items. All attributes are listed first, followed by the elements.

The following information should help you interpret and understand this standard. Please note the following:

- Content Model and Cardinality operate together to determine if the element or attribute are required in the instance document.
- The same attribute can never appear multiple times in the same element so, you will never see a multiple cardinality indicator.

Content model indicators:

There are three possible types of content: "sequence", "choice", and "all". The papiNet standard currently does not use the "all" construct.

- (sequence)

The sequence of the items to the right of the graphic (or below the text) is required.

- (choice)

A choice of the items to the right of the graphic (or below the text) is permitted.

- (all)

All the items to the right of the graphic are required.

Cardinality indicators:

- Dotted line around element or attribute.

A single instance of the item can optionally exist.

- Dotted line around item with range indicated below.

Multiple instances of the item can optionally exist.

- Solid line around item.

A single instance of the item must exist.

- Solid line around item with range indicated below

At least one instance must exist; multiple instances can optionally exist.

Datatype indication:

When a data type is assigned to an element (either a simple type or complex type the name of the data type is presented beneath the item name in the graphic.

- In some cases additional information about the data type is presented (the default value).

Elements can either have content that is textual/numeric in nature or content that is made up of additional elements and/or attributes.

- When the content is textual/numeric in nature "three straight horizontal lines" will appear in the upper left-hand corner of the graphic. Pay attention to these elements because they are where you will be entering

Usage

papiNet Standard - Version 2.31

your information.

- When the content is made up of additional elements and/or attributes a "gray-box" will appear on the right-hand side of the graphic.
- If the graphic shows both the horizontal lines and the gray-box then, in the papiNet standard, the content below the element are attributes.

Usage

papiNet Standard - Version 2.31

Usage Root Element

Usage

The root element of the Usage message. The Usage Message is used to notify a supplier or buyer that material has been consumed within the manufacturing process.

UsageStatusType [attribute]

UsageStatusType is mandatory. A single instance is required.

Identifies the status of the entire Usage message

This item is restricted to the following list.

Cancelled

Indicates that the ConsumingParty wants to cancel the previous message

Original

Indicates that this is the first transmission on the message

Replaced

Indicates that the ConsumingParty wants to replace the previous message

Language [attribute]

Language is optional. A single instance might exist.

XML has embraced 2 and 3 digit language codes through the application of an addendum to the standard.

Information on the content of this attribute is available at <http://www.loc.gov/standards/iso639-2/> this is the official site of the ISO 639-2 Registration Authority.

- <http://www.w3.org/International/O-HTML-tags.html> provides an explanation of the errata updating XML.
- <http://www.ietf.org/rfc/rfc3066.txt> is the key document that is referenced in the above errata.

Reissued [attribute]

Reissued is optional. A single instance might exist.

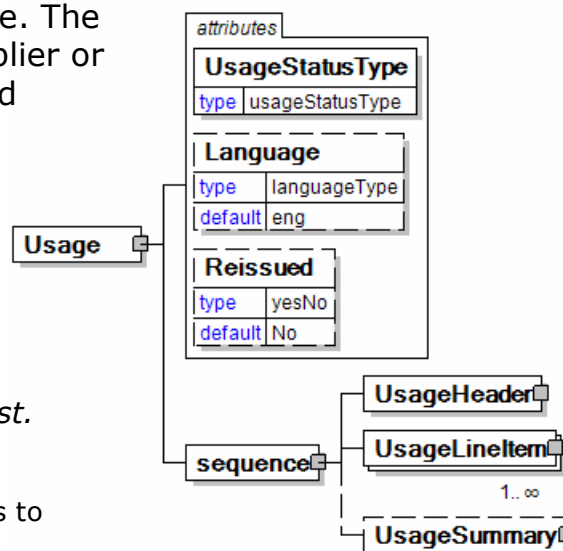
Either "Yes" or "No".

This item is restricted to the following list.

Yes

No

(sequence)



Usage

papiNet Standard - Version 2.31

The contents of (sequence) are mandatory. A single instance is required.

UsageHeader

UsageHeader is mandatory. A single instance is required.

Information that is common to the entire Usage message.

UsageLineItem

UsageLineItem is mandatory. One instance is required, multiple instances might exist.

The details of the Usage message.

UsageSummary

UsageSummary is optional. A single instance might exist.

The root element of the Usage message.

Usage

papiNet Standard - Version 2.31

Primary Elements

UsageHeader

Information that is common to the entire Usage message.

(sequence)

The contents of (sequence) are mandatory. A single instance is required.

UsageNumber

UsageNumber is mandatory. A single instance is required.

Unique identifier assigned to each Usage document as agreed by the trading partners.

UsageHeaderReference

UsageHeaderReference is optional. Multiple instances might exist.

An element that details relevant references to the Usage Header. The content of the UsageHeaderReference is identified by the UsageReferenceType attribute.

UsageIssuedDate

UsageIssuedDate is mandatory. A single instance is required.

Identifies the Date and Time when the usage information has been reported.

TransactionHistoryNumber

TransactionHistoryNumber is optional. A single instance might exist.

A sequential number that keeps track of the version of a document being sent by the document originator except in the case where TransactionHistoryConfirmation is used, in which case the TransactionHistoryNumber refers to the trigger transaction for which the confirmation is being sent.

TimePeriod

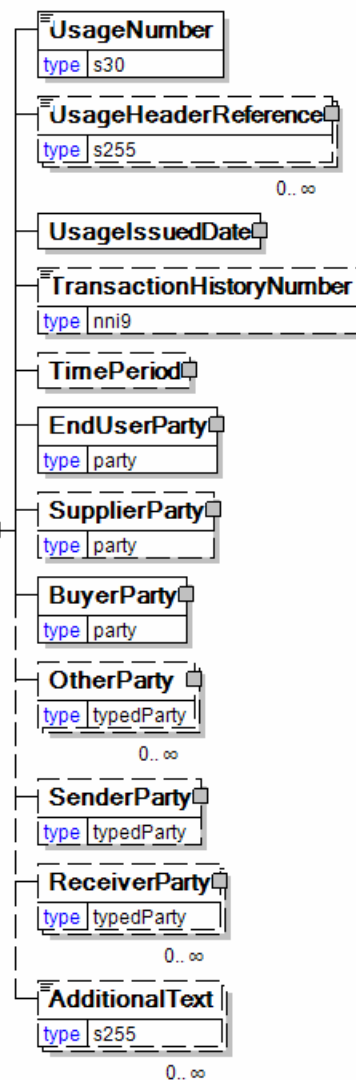
TimePeriod is optional. A single instance might exist.

The TimePeriod element is used to communicate a duration period of time as indicated in PeriodType.

EndUserParty

EndUserParty is mandatory. A single instance is required.

The party using, consuming, or converting the product. For example, a printer



Usage

papiNet Standard - Version 2.31

using paper reels for a print job for a publisher. The final ShipTo destination for a product is normally to the end user's facilities.

SupplierParty

SupplierParty is optional. A single instance might exist.

The organisation or business entity responsible for providing the product. SupplierParty is also the seller of the product, if Seller is not specified as OtherParty = Seller.

BuyerParty

BuyerParty is mandatory. A single instance is required.

The legal entity to which the product is sold. Also commonly referred to as the sold-to party or customer. If no OtherParty is defined as the Payer, the Buyer is the Payer.

OtherParty

OtherParty is optional. Multiple instances might exist.

An organisation or business entity other than those specifically detailed within a business document.

SenderParty

SenderParty is optional. A single instance might exist.

The business entity issuing the business document, the source of the document.

- This is the same entity as the "From" party in the ebXML message service envelope. The entity responsible for the content. If the sender party has outsourced the transmission function to a third party the sender party is the original party not the party performing the transmission service.

ReceiverParty

ReceiverParty is optional. Multiple instances might exist.

The business entity for whom the business document is intended, the destination of the document.

- This is the same entity as the "To" party in the ebXML message service envelop. The entity interested in the content. If the receiver party has outsourced the message receipt function to a third party the receiver party is the intended party not the party performing the receiving process.

AdditionalText

AdditionalText is optional. Multiple instances might exist.

A text field that is used to communicate information not previously defined or for special instructions. To be used only for circumstances not covered by specific elements.

Usage

papiNet Standard - Version 2.31

UsageLineItem

The details of the Usage message.

(sequence)

The contents of (sequence) are mandatory. A single instance is required.

UsageLineItemNumber

UsageLineItemNumber is mandatory. A single instance is required.

A sequential number that uniquely identifies the usage line item.

UsageReference

UsageReference is optional. Multiple instances might exist.

A repeatable element that details relevant references pertaining to the usage. The content of the UsageReference is identified by UsageReferenceType.

LocationParty

LocationParty is optional. A single instance might exist.

The organization or business entity where the business event took place or will take place.

WasteQuantity

WasteQuantity is optional. Multiple instances might exist.

The quantity of product wasted.

WebBreaks

WebBreaks is optional. Multiple instances might exist.

The number of web breaks.

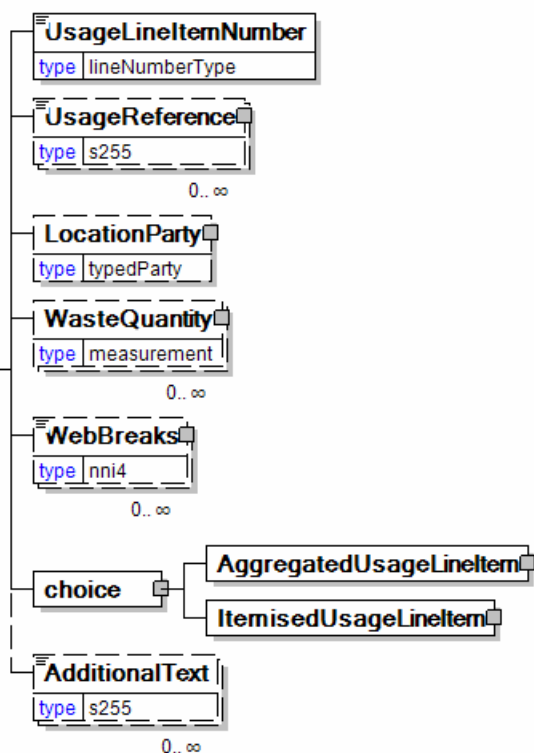
(choice)

The contents of (choice) are mandatory. A single instance is required.

AggregatedUsageLineItem

AggregatedUsageLineItem is mandatory. A single instance is required.

A group item that summarises item usage at the Product level or at the Product plus PurchaseOrder level. Details concerning the individual items used are not included.



Usage

papiNet Standard - Version 2.31

ItemisedUsageLineItem

ItemisedUsageLineItem is mandatory. A single instance is required.

A group item containing information that relates to an itemized amount of usage.

AdditionalText

AdditionalText is optional. Multiple instances might exist.

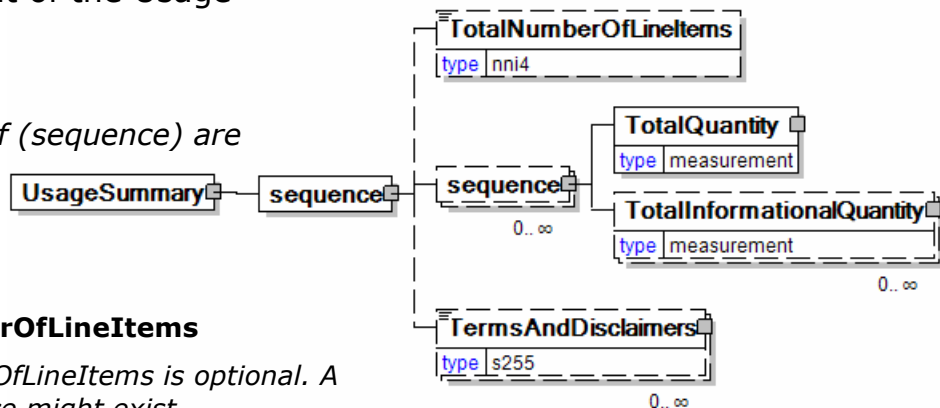
A text field that is used to communicate information not previously defined or for special instructions. To be used only for circumstances not covered by specific elements.

UsageSummary

The root element of the Usage message.

(sequence)

The contents of (sequence) are mandatory. A single instance is required.



TotalNumberOfLineItems

TotalNumberOfLineItems is optional. A single instance might exist.

The total number of individual line items in the document, regardless of the status or type.

(sequence)

The contents of (sequence) are optional. Multiple instances might exist.

TotalQuantity

TotalQuantity is mandatory. A single instance is required.

The total quantity of similar items in the business document. TotalQuantity is primarily used in the summary section of documents where it is repeatable to permit totaling for different units of measure.

TotalInformationalQuantity

TotalInformationalQuantity is optional. Multiple instances might exist.

A quantity that is used to communicate related information about the parent element. This element represents a total that is derived from individual line items.

TermsAndDisclaimers

TermsAndDisclaimers is optional. Multiple instances might exist.

An element that contains legal information with an indication of what the Language is.

Usage

papiNet Standard - Version 2.31

Usage Business Scenarios

Usage Scenario Listing

| | |
|-------------------|---|
| Scenario A | A ConsumingParty (Printer) reports Aggregate Usage to a Supplier for an Order Product at end of day |
| Scenario B | A ConsumingParty (Converter), which converts reels into finished product, reports itemised usage to a Supplier; Reels are considered fully consumed once they are stripped. |
| Scenario C | A ConsumingParty (Printer) reports Itemised Usage to a BuyerParty (Publisher) for the printing of a magazine; a single Supplier's Paper has been consumed. Aggregate spoilage and Paper Caused Web Breaks are also reported. |
| Scenario D | A ConsumingParty (Printer) reports Itemised Usage to a BuyerParty (Publisher) for the printing of a magazine; paper from multiple Suppliers has been consumed. The ConsumingParty (Printer) also shares Aggregated Usage with those Suppliers whose paper was consumed. |
| Scenario E | A ConsumingParty (Printer) reports Aggregated Usage on book printing utilizing both reels and sheets to a Merchant Supplier; Usage is reported against a Purchase Order. |
| Scenario F | A ConsumingParty (Printer) of text books reports Aggregated Usage of reels and sheets; Usage is reported weekly to the Supplier in support of standing Purchase Order replenishment arrangement; Usage is reported monthly aggregated to the Publisher. |
| Scenario G | Replacement of a Usage message. |
| Scenario H | Cancellation of a Usage message. |

Scenario A

| | |
|----------------|-------|
| Message | Usage |
|----------------|-------|

Usage

papiNet Standard - Version 2.31

| | |
|------------------|---|
| Scenario | An EndUserParty (Printer) reports Aggregated Usage to a Supplier for an Order Product at end of day. |
| Agreement | The Printer and the Supplier have a form of Vendor Managed Inventory where consumption is reported daily. If quantities on hand go below a specified level, the Supplier replenishes the Printer Location. |
| Example | <p>The Printer, who is also the Buyer of the paper, has consumed 30,000 pounds of Product A, on 7th November 2001 at a Printer Location.</p> <p>The Printer sends a Usage document to the Supplier daily</p> |
| Header | <p>Format Header Parties</p> <ul style="list-style-type: none"> • EndUserParty = Printer • BuyerParty = Printer • SupplierParty = Supplier • Reference the Vendor Managed Inventory arrangement by ContractNumber by putting the ContractNumber in UsageHeaderReference with a ReferenceType of ContractNumber • Specify the ReportingPeriod of 20011107 |
| Line Item | <p>UsageLineNumber is set to 1</p> <p>LocationParty is set to the converter plant.</p> <p>AggregatedUsageLineItem is used to report the product consumed</p> <p>PurchaseOrderInformation is left blank because the Vendor Managed Inventory controls replenishment.</p> |
| Results | The Supplier ERP System reduces the total inventory for Product A at a particular Printer Location. If inventory is less than the replenishment level, agreed upon replenishment takes place. |

Scenario B

| | |
|------------------|---|
| Message | Usage |
| Scenario | An EndUserParty (Converter), converts reels into finished product, reports Itemised Usage to a Supplier ; Reels are considered fully Consumed once they are stripped. |
| Agreement | The Converter and Supplier have an agreement |

Usage

papiNet Standard - Version 2.31

| | |
|----------------|---|
| | where usage is reported daily based on those reels that were stripped. The Supplier will re-supply when the reels on hand get to a certain level. |
| Example | <p>10 full reels have been consumed, 2000 pounds each.</p> <ul style="list-style-type: none"> The Converter sends a Usage document to the Supplier daily. |
| Header | <p>Usage Header Parties</p> <ul style="list-style-type: none"> EndUser = Converter BuyerParty = Converter SupplierParty = Supplier B Specify usage date in the ReportingPeriod. |
| Line Item | <p>Itemised Usage Line Item</p> <ul style="list-style-type: none"> UsageLineItemNumber is set to 1 LocationParty is set to the converter plant ItemisedUsageLineItem is used to report the detail reels consumed Product is not required since detail reel identifiers are included PurchaseOrderInformation is left blank |
| Details | <p>Itemised Usage Line Item Details; Fully Consumed Reels</p> <ul style="list-style-type: none"> Usage Status for the fully consumed reels are marked with a UsageStatus of Consumed The IdentifierType is Reel; the Identifier specifies the Reel Number Quantity is the GrossWeight Consumed; this Quantity is the full weight of the reel |
| Results | <p>The Supplier ERP System is updated reducing the number of reels on hand.</p> <ul style="list-style-type: none"> Fully consumed reels are removed from the inventory if re-supply levels are reached, the Supplier will deliver additional reels. |

Scenario C

| | |
|-----------------|--|
| Message | Usage |
| Scenario | An EndUserParty(Printer) reports Itemised Usage to |

Usage

papiNet Standard - Version 2.31

| | |
|------------------|--|
| | a BuyerParty (Publisher) for the printing of a magazine; a single Supplier's Paper has been consumed. |
| Agreement | The Printer and the Publisher have an agreement where consumption is reported at end of each job. Consumption is reported at the detail reel level. Spoilage is reported at the aggregate level. Paper caused web breaks are reported at the detail reel level. |
| Example | <p>20,150 Pounds have been consumed in the printing of a magazine. 10 full reels have been consumed, 2000 pounds each; 150 Pounds of an additional reel has been consumed. All reels consumed are from Supplier B. There was the following spoilage: Waste Core (5 lbs); Waste Make Ready (10 lbs); Waste Running (15 lbs); Waste Strip (20 lbs) and Waste Wrapper (5 lbs). There was one Paper Caused Web Break.</p> <ul style="list-style-type: none"> The Printer sends a Usage document to the Publisher within an agreed upon time after the end of the job. |
| Header | <p>Format Header Parties</p> <ul style="list-style-type: none"> ConsumingParty = Printer; BuyerParty = Publisher; SupplierParty = Supplier B Reference the JobNumber, PubNumber, and PubName printed by including each in UsageHeaderReference |
| Line Item | <p>Itemised Usage Line Item</p> <ul style="list-style-type: none"> UsageLineNumber is set to 1 UsageReference is used to specify the FormType of "AD" for Advanced; other values for Form Type are "CO" for Cover, and "CU" for Current LocationParty is set to the Printer Location or printing plant ItemisedUsageLineItem is used to report the detail reels consumed |

Usage

papiNet Standard - Version 2.31

| | |
|----------------|---|
| | <ul style="list-style-type: none"> • Product is not required since detail reel identifiers are included • PurchaseOrderInformation is left blank • Quantity is used to record the total quantity consumed, 20,150 pounds. The QuantityType is set to "GrossWeight". |
| Details | <p>Itemised Usage Line Item Details; Fully Consumed Reels</p> <ul style="list-style-type: none"> • Usage Status for the fully consumed reels are marked with a UsageStatus of Consumed • The IdentifierType is Reel; the Identifier specifies the Reel Number • Quantity is the GrossWeight Consumed; this Quantity is the full weight of the reel • For those reels that have a paper caused web break, InformationalQuantity is used to record the 1 Paper Caused Web Break, the QuantityType is "Count", and the QuantityTypeContext is "WebBreaks PaperCaused". |
| Details | <p>Itemised Usage Line Item Details; Partially Consumed Reels</p> <ul style="list-style-type: none"> • UsageStatus for the partially consumed but still useable reels are marked with a UsageStatus of UsableButt • The ItemType is ReelItem, the Identifier specifies the Reel Number. • Quantity is GrossWeight Consume, this Quantity is that part of the reel that was consumed for this job. |
| Results | <p>The Publisher ERP System is updated reducing the detail inventory.</p> <ul style="list-style-type: none"> • Fully consumed reels are removed from the inventory. • Partially consumed reels have the quantity consumed (150 pounds in the example) subtracted from the amount available • The Publisher ERP System charges the Usage to the Magazine printed by issue date. |

Usage

papiNet Standard - Version 2.31

- The Publisher ERP System is updated to record Spoilage and Paper Caused Web Breaks.

Scenario D

| | |
|------------------|--|
| Message | Usage |
| Scenario | An EndUserParty(Printer) reports Itemised Usage to a BuyerParty (Publisher) for the printing of a magazine; paper from multiple Suppliers has been consumed. The EndUserParty (Printer) also shares Aggregated Usage with those Suppliers whose paper was consumed. |
| Agreement | The Printer and the Publisher have an agreement where consumption is reported at end of each job number. Consumption is reported to the Publisher at the detail reel level. A separate Usage message is sent for each Supplier whose paper is consumed. The Printer also sends an Aggregated Usage message to any Suppliers whose paper has been consumed. This supports Vendor Managed Inventory. |
| Example | <p>11,500 kilograms have been consumed in the printing of a magazine. 7 full reels or 7000 kilograms are from Supplier C. 4 full reels and 1 partial reels or 4500 kilograms are from Supplier D.</p> <ul style="list-style-type: none"> • The Printer sends 2 Itemised Usage documents, 1 for • Supplier C and 1 for Supplier D, to the Publisher within an • agreed upon time after end of job. • The Printer sends an Aggregated Usage document to Supplier C. • The Printer sends an Aggregated Usage document to Supplier D. |
| Part 1. | Message to Publisher concerning Supplier C Paper; Detailed reporting. |
| Header | Format Header Parties <ul style="list-style-type: none"> • EndUserParty = Printer • BuyerParty = Printer |

Usage

papiNet Standard - Version 2.31

| | |
|------------------|--|
| | <ul style="list-style-type: none"> • SupplierParty = Supplier C • Reference the JobNumber, Magazine Code, and Magazine Title printed and IssueDate by including each in UsageHeaderReference. • Specify the UsageIssueDate. |
| Line Item | <p>Aggregated Line Item 1</p> <ul style="list-style-type: none"> • UsageLineNumber is set to 1 • LocationParty is set to the Printer Location or printing plant • ItemisedUsageLineItem is used to report detail reels consumed • Product is not required since detail reel identifiers are included. • PurchaseOrderInformation is left blank. |
| Details | <p>Itemised Usage Line Item Details; Fully Consumed Reels</p> <ul style="list-style-type: none"> • Usage Status for the fully consumed reels are marked with a UsageStatus of "Consumed". • The ItemType is ReelItem; the Identifier specifies the Reel ID. • Quantity is the GrossWeight Consumed; this Quantity is the full weight of the reel. |
| Step 2. | <p>Message to Publisher concerning Supplier D Paper; Detailed reporting</p> |
| Header | <p>Format Header Parties</p> <ul style="list-style-type: none"> • EndUserParty = Printer • BuyerParty = Printer • SupplierParty = Supplier D • Reference the JobNumber, Magazine Code, and Magazine Title printed by including each in UsageHeaderReference. • Specify the Reporting Period of Issue Date of the Magazine. |
| Line Item | <p>Itemised Usage Line Item; Line 1</p> <ul style="list-style-type: none"> • UsageLineNumber is set to 1 • ItemisedUsageLineItem is used to report the detail reels consumed. • Product is not required since detail reel |

Usage

papiNet Standard - Version 2.31

| | |
|------------------|--|
| | <p>identifier are included</p> <ul style="list-style-type: none"> • PurchaseOrderInformation is left blank. |
| Details | <p>Itemised Usage Line Item Details; Fully Consumed Reels</p> <ul style="list-style-type: none"> • Usage Status for the fully consumed reels is marked with a UsageStatus of Consumed. • The ItemType is ReelItem; the Identifier specifies the Reel Number. • Quantity is the GrossWeight Consumed, this Quantity is the full weight of the reel. |
| Details | <p>Itemised Usage Line Item Details; Partially Consumed Reels</p> <ul style="list-style-type: none"> • Usage Status for the partially consumed reels is marked with a UsageStatus of UsableButt. • The ItemType is ReelItem; the Identifier specifies the Reel Number. • Quantity is the GrossWeight Consumed, this Quantity is that part of the reel that was consumed for this job. |
| Step 3 | <p>Message to Supplier C concerning their paper; aggregated reporting</p> |
| Header | <p>Format Header Parties</p> <ul style="list-style-type: none"> • EndUserParty = Printer • BuyerParty = Printer • SupplierParty = Supplier C • Reference the JobNumber, Magazine Code, and Magazine Title printed by including each in UsageHeaderReference. • Specify the Reporting Period of Issue Date of the Magazine. |
| Line Item | <p>Aggregated Line Item</p> <ul style="list-style-type: none"> • UsageLineNumber is set to 1 • LocationParty is set to the Printer Location or printing plant. • Product refers to ProductIdentifier for Product A. • PurchaseOrderInformation is left blank because the Vendor Managed Inventory controls |

Usage

papiNet Standard - Version 2.31

| | |
|------------------|--|
| | <p>replenishment.</p> <ul style="list-style-type: none"> Quantity details that 7000 pounds GrossWeight has been consumed. |
| Step 4 | Message to Supplier D concerning their paper; aggregated reporting. |
| Header | <p>Format Header Parties</p> <ul style="list-style-type: none"> EndUserParty = Printer BuyerParty = Printer SupplierParty = Supplier D Reference the JobNumber, Magazine Code, and Magazine Title printed by including each in UsageHeaderReference. Specify the Reporting Period of Issue Date of the Magazine. |
| Line Item | <p>Aggregated Line Item</p> <ul style="list-style-type: none"> UsageLineNumber is set to 1 LocationParty is set to the Printer Location or printing plant. Product refers to ProductIdentifier for Product A. PurchaseOrderInformation is left blank because the Vendor Managed Inventory controls replenishment. Quantity details that 4500 pounds GrossWeight has been consumed. |
| Results | <p>The Publisher ERP System is updated reducing the detail inventory.</p> <ul style="list-style-type: none"> Fully consumed reels are removed from the inventory. Partially consumed reels have the quantity consumed (500 kilograms in the example) subtracted from the amount available The Publisher ERP System charges the Usage to the Magazine printed by issue date. The 2 Supplier ERP Systems are updated to reflect the total inventory on hand. |

Usage

papiNet Standard - Version 2.31

Scenario E

| | |
|------------------|---|
| Message | Usage |
| Scenario | An EndUserParty(Printer) reports Aggregated Usage on book printing utilizing both reels and sheets to a Merchant Supplier; Usage is reported against a Purchase Order. |
| Agreement | The Printer and the Merchant have a form of Vendor Managed Inventory where consumption is reported at end of job. If a Trade Book job prints over a number of days, the Usage message may be sent when the Trade Book run is complete. Reel and sheet usage are reported in aggregate against a Purchase Order. Via a VMI contract, the Merchant is charged with understanding what product remains at end of job and adjusting outstanding Purchase Order Quantities. |
| Example | <p>Purchase Order 123 ordered 3 Order Line items that are components of the Trade Book:</p> <ul style="list-style-type: none"> • 500,000 Pounds in Reels of Order Product B for the body of the book • 5000 Sheets of Order Product C for book inserts • 5000 Pounds in Reels of Order Product D for cover stock • The complete job printed from 2001/12/05 to 2001/12/30 • 420,000 Pounds of Order Product B book body • 3700 Sheets of Order Product C book inserts • 4900 Pounds of Order Product D cover stock |
| Header | <p>Format Header Parties</p> <ul style="list-style-type: none"> • EndUserParty = Printer • BuyerParty = Publisher • SupplierParty = Merchant • Reference the Vendor Managed Inventory arrangement by ContractNumber by putting the ContractNumber in UsageHeaderReference with a ReferenceType of ContractNumber • Specify the ReportingPeriod of 2001/12/05 to 2001/12/30. |

Usage

papiNet Standard - Version 2.31

| | |
|------------------|--|
| Line Item | <p>Aggregated Line Item 1</p> <ul style="list-style-type: none"> • UsageLineNumber is set to 1 • LocationParty is set to the Printer Location or printing plant. • AggregatedUsageLineItem is used to report total quantity consumed. • Product refers to ProductIdentifier for Product B. • The PurchaseOrderLineItem and PurchaseOrderLineItemNumber are referenced. • Quantity details that 420,000 pounds GrossWeight has been consumed. |
| Line Item | <p>Aggregated Line Item 2</p> <ul style="list-style-type: none"> • UsageLineNumber is set to 2 • LocationParty is set to the Printer Location or printing plant. • AggregatedUsageLineItem is used to report total quantity consumed. • Product refers to ProductIdentifier for Product C. • The PurchaseOrderLineItem and PurchaseOrderLineItemNumber are referenced. • Quantity details that 3700 Sheets have been consumed. |
| Line Item | <p>Aggregated Line Item 3</p> <ul style="list-style-type: none"> • UsageLineNumber is set to 3 • LocationParty is set to the Printer Location or printing plant. • AggregatedUsageLineItem is used to report total quantity consumed. • Product refers to ProductIdentifier for Product D. • The PurchaseOrderLineItem and PurchaseOrderLineItemNumber are referenced. • Quantity details that 4900 pounds GrossWeight have been consumed. |
| Results | <p>The Supplier Business Application is updated reducing the aggregate inventory</p> |

Usage

papiNet Standard - Version 2.31

Scenario F

| Message | Usage |
|------------------|--|
| Scenario | An EndUser (Printer) of text books reports Aggregated Usage of reels and sheets; Usage is reported weekly to the Supplier in support of a standing Purchase Order replenishment arrangement; Usage is reported monthly aggregated to the Publisher. |
| Agreement | The Printer and the Supplier have a form of Vendor Managed Inventory where consumption is reported for reels and sheets weekly. The Printer and Supplier have a Standing Purchase Order wherein replenishment occurs if inventory levels fall below the agreed upon quantity. The Printer also reports aggregated reel and sheet Usage to the Publisher monthly. |
| Example | <p>Weekly Usage in December, 2001</p> <ul style="list-style-type: none"> • Week 1 <ul style="list-style-type: none"> • 130,000 Sheets of Order Product M, Purchase Order 234, Line 1 • 400,000 Sheets of |

Usage papiNet Standard - Version 2.31

| | | | |
|-----------------------------------|---|--------------|--|
| | <p>Order Product N, Purchase Order 234, Line 2</p> <p>Week 2, 3, and 4 of month</p> <ul style="list-style-type: none"> • 240,000 Sheets of Order Product M, Purchase Order 234, Line 1 • 700,000 Sheets of Order Product N, Purchase Order 234, Line 2 <p>Monthly usage totals in December, 2001</p> <ul style="list-style-type: none"> • 370,000 Sheets of Order Product M, Purchase Order 234, Line 1 • 1,100,000 Sheets of Order Product N, Purchase Order 234, Line 2 | | |
| Report to Supplier | The Printer sends a Usage document to the Supplier weekly; December week one is given as an example | | |
| Header | | Line Item | <p>Aggregated Line 1</p> <ul style="list-style-type: none"> • UsageLineItemNum ber is set to 1 • LocationParty is set to the Printer Location or printing plant. • AggregatedUsageLi neItem is used to report total quantity consumed. • Product refers to |

Usage papiNet Standard - Version 2.31

| | | | |
|------------------|--|--|--|
| | | | <p>ProductIdentifier for Product M.</p> <ul style="list-style-type: none"> • The PurchaseOrderLineItem and PurchaseOrderLineItemNumber is referenced, PurchaseOrder 234, Line 1. • Quantity details that 130,000 pounds GrossWeight has been consumed. |
| Line Item | <p>Aggregated Line 2</p> <ul style="list-style-type: none"> • UsageLineItemNumber is set to 2 • LocationParty is set to the Printer Location or printing plant. • AggregatedUsageLineItem is used to report total quantity consumed. • Product refers to ProductIdentifier for Product N. • The PurchaseOrderLineItem and PurchaseOrderLineItemNumber is referenced, PurchaseOrder 234, Line 2. • Quantity details that 400,000 Pounds | | |

Usage papiNet Standard - Version 2.31

| | |
|----------------------------|--|
| | GrossWeight have been consumed. |
| Report to Publisher | The Printer sends a Usage document to the Publisher monthly. |
| Header | Format Header Parties <ul style="list-style-type: none"> • EndUserParty = Printer • BuyerParty = Publisher • SupplierParty = Supplier • Reference the Vendor Managed Inventory arrangement by ContractNumber by putting the ContractNumber in UsageHeaderReference with a ReferenceType of ContractNumber • Specify the ReportingPeriod of Date From/ Date To specifying the full month of December |
| Line Item | Aggregated Line 1 <ul style="list-style-type: none"> • UsageLineItemNumber is set to 1 • LocationParty is set to the Printer Location or printing plant. • AggregatedUsageLineItem is used to report total quantity |

Usage

papiNet Standard - Version 2.31

| | |
|------------------|---|
| | <p>consumed.</p> <ul style="list-style-type: none">• Product refers to ProductIdentifier for Product M.• The PurchaseOrderLineItem and PurchaseOrderLineNumber is referenced, PurchaseOrder 234, Line 1.• Quantity details that 370,000 pounds GrossWeight has been consumed. |
| Line Item | <p>Aggregated Line 2</p> <ul style="list-style-type: none">• UsageLineItemNumber is set to 2• LocationParty is set to the Printer Location or printing plant.• AggregatedUsageLineItem is used to report total quantity consumed.• Product refers to ProductIdentifier for Product N.• The PurchaseOrderLineItem and PurchaseOrderLineNumber is referenced, PurchaseOrder 234, Line 2.• Quantity details |

Usage papiNet Standard - Version 2.31

| | |
|----------------|---|
| | that 1,100,000 Pounds GrossWeight have been consumed. |
| Results | The Supplier Business Application is updated reducing the aggregate inventory The Publisher Business Application is updated reducing the aggregate inventory |

Scenario G

| | |
|------------------|--|
| Message | Usage |
| Scenario | Replacement of a Usage Message |
| Agreement | The EndUserParty (Printer) and the Supplier have a form of Vendor Managed Inventory where consumption is reported for Aggregate Usage daily. |
| Example | The EndUserParty (Printer) has sent a Usage message, UsageNumber 345678, to a Supplier. This message erroneously reported that 400,000 pounds of a Product had been consumed on a particular day. This report needs to be corrected in UsageNumber456789; it should have been 300,000 pounds |
| Header | Format Header <ul style="list-style-type: none"> • ConsumingParty = Printer • BuyerParty = Printer • SupplierParty = Supplier • Set the UsageStatusType to Replaced • Specify the OriginalUsageNumber of 345678 in UsageHeaderReference |
| Line Item | Aggregated Line Item <ul style="list-style-type: none"> • UsageLineNumber is set to 1, this content should be the corrected usage. • LocationParty is set to the Printer Location or printing plant. • AggregatedUsageLineItem is used to report total quantity consumed • Product refers to ProductIdentifier for Product |

Usage

papiNet Standard - Version 2.31

| | |
|----------------|--|
| | <p>A.</p> <ul style="list-style-type: none"> PurchaseOrderInformation is left blank because the Vendor Managed Inventory controls replenishment. Quantity details that 300,000 Pounds GrossWeight has been consumed. |
| Results | <p>The Supplier ERP system backs out the original erroneous 400,000 pounds of usage reported on Usage message 345678. The Supplier ERP System processes the replacement Usage message, 456789, and reduces the total inventory for Product A at a particular Printer Location by 300,000 pounds.</p> |

Scenario H

| | |
|------------------|--|
| Message | Usage |
| Scenario | Cancellation of a Usage Message |
| Agreement | The EndUserParty (Printer) and the Supplier have a form of Vendor Managed Inventory where consumption is reported for Aggregate Usage daily. |
| Example | The EndUserParty (Printer) has sent a Usage message, UsageNumber 56789, to a Supplier. This message erroneously reported that 900,000 pounds of a Product had been consumed on a particular day. |
| Header | <p>Format Header</p> <ul style="list-style-type: none"> ConsumingParty = Printer BuyerParty = Printer SupplierParty = Supplier Set the UsageStatusType to Cancelled Specify the OriginalUsageNumber of 56789 in UsageHeaderReference |
| Line Item | <p>UsageLineItemNumber is set to 1, this content should be the corrected usage.</p> <ul style="list-style-type: none"> LocationParty is set to the Printer Location or printing plant. AggregatedUsageLineItem is used to report total quantity consumed Product refers to ProductIdentifier for Product A. PurchaseOrderInformation is left blank because |

Usage

papiNet Standard - Version 2.31

| | |
|----------------|---|
| | <p>the Vendor Managed Inventory controls replenishment.</p> <ul style="list-style-type: none">• Quantity details that 0 Pounds GrossWeight has been consumed. |
| Results | <p>The Supplier ERP system backs out the original erroneous 900,000 pounds of usage reported on Usage message 56789.</p> |