



Technical Documentation

Ingram Micro eSolutions Group

Documentation Revised: July 8, 2010

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Overview

What is IM-XML?

IM-XML is Ingram Micro's XML ecommerce solution that uses cutting edge technology allowing business process and system integration with our trading partners. It is a solution designed to meet and exceed our Trading Partners requirements.

Put simply, IM-XML will deliver *cost reduction* and *process improvement* of day-to-day business activity with our Trading Partners

IM-XML is *easier, quicker* and *cheaper* to implement than other integrated solutions such as EDI. This will cut down the development time and will allow Ingram Micro and its Trading Partners to integrate their systems more quickly. Integrated systems bring obvious benefits such as fewer phone calls for price and availability checks and order placement. It allows the Trading Partner to manage their own business activity with less reliance on Ingram Micro sales representatives to manage their account.

IM-XML allows *seamless integration* of the order process from the Trading Partner to Ingram Micro. Trading partners can empower their purchasing team to have instant access to Ingram Micro's inventory and can also be used to provide a similar 'virtual warehouse' scenario to an end-user website. Data and process flows can be incorporated into a Trading Partners financial and ordering system, desktop applications and more.

IM-XML provides functionality that is divided into distinctive transactions that have been designed to allow business process flexibility, optimum performance and to limit the amount of redundant data. Each transaction can be uniquely applied to certain key areas of the order management process and can be combined to provide a wealth of information.

IM-XML is a *real-time system*, which means that transactions are processed within seconds and provide accurate data directly from the IM system. Trading Partners can use the power of IM-XML to deliver fast and accurate data internally to their purchasing team and to their customers. High quality, high accuracy and high speed data allows business decisions to be made with confidence.

The transactions are:

Price & Availability v2.0 (P&A) – Up to 50 Ingram Micro SKUs (or using other criteria specified below) can be queried in a single IM-XML transaction

Synchronous Order Request v2.0 and ***Asynchronous Order Request v2.5*** – Standard products can be ordered.

Dtype Order Request v2.0 (License/Warranty) – License and warranty products can be ordered.

Order Change v2.0 – Allows all details (such as quantity, SKU, ship to address) to be changed by the Trading Partner before the order is released

Order Status v2.0 – Includes fundamental order status information such as Ingram Micro sales order number, customer purchase order number, order entry date, order suffix, total sales amount, status (such as shipped, billed, back-ordered), invoice date, ship date, credit memo)

Order Detail v2.0 – Highly detailed containing a large amount of data such as weight, order entry date, sales total, freight total, tax total, grand total, ship to attention, ship to address, bill to address, order status, carrier, ship date, SKU, manufacturers SKU, order quantity, back order quantity, unit price, Manufacturer Part Number, description, IM line number, customer line number, comments.

Order Tracking v2.0 – Includes focused tracking data such as Ingram Micro sales order number, weight, carton count, order suffix, carrier, package ID, ship date, box number, tracking URL, SKU, UPC, Manufacturer Part Number, Customer Part Number

BaseRate v1.0- A sorted list of carrier code, freight rate, and transit information specific to an order distribution is returned to help you select the most appropriate shipping option for your order before the order is released.

RMA Submittal v1.0 – enables partners to submit detailed information on particular products to Ingram for a Return on Merchandise.

Advance Shipment Notification v2.0 (ASN) – Provides shipping information for each order that is shipped from Ingram Micro.

Invoice v1.0 – Provides invoice information for each order that is shipped from Ingram Micro.

What is new with IM-XML?

Ingram Micro has recently made some updates to our IM-XML program. We have added new functionality in order to provide our customers with the option to significantly increase the amount of information they are able to provide to us on their IM-XML requests as well as receive on the IM-XML responses that they receive from us. This increase in data is specifically applicable to the Price and Availability, Order Tracking Response as well as all the Order Entry and Post Order Entry transactions.

Changes to existing IMXML transactions are highlighted in blue in this document.

We have also added some Additional Order Entry Options for our partners. These options will allow our partners to have more control over the behavior of their orders when they come into the IM system.

Increased Detail Requests and Responses (PnA, Order Entry/Response)

The extra data that we have recently added to the IM-XML functionality is controlled by the partner through the use of the element <ShowDetail> = 2. The extra data that can be requested and returned may not be applicable to all countries or all customers as this data can be dependent upon what is stored within the IM system. Some of the returned elements may not contain information unless very specific conditions occur for the country, customer and transaction. The new elements that we have included in our request and response documents when using <ShowDetail> = 2 for the Price and Availability transaction, Order Tracking, Order Entry and Post Order Entry transactions are as follows :

Manufacturer Part Number
Customer Part Number (if applicable)
UPC code (if applicable)

The addition of these new elements gives our partners the ability to send in Price and Availability transactions as well as Order Entry transactions using Manufacturer Part Number, Customer Part Number or UPC code instead of specifying the Ingram Micro sku number.

Increased Detail Response (Order Tracking Response)

The extra data that we have recently added to the Order Tracking response includes more detail at the line level of a shipment. The new elements include quantity shipped per line as well as the IM order line number.

Important To Note:

For PnA and Order Entry, when using any of the new above criteria instead of the IM sku, a partner can only specify one criterion per line. A partner cannot send in

multiple criteria per line.

All of the above mentioned new additional elements detailed in the transaction documentation below (for Price and Availability, Order Tracking response and Order Entry and Post Order Entry transactions) are highlighted in blue. These new elements that we have added in the request and response transactions will only be applicable when the partner chooses **<ShowDetail> = 2**.

The Increased Detail Requests and Responses are specifically applicable to the Price and Availability, Order Tracking response and all the Order Entry and Post Order Entry transactions.

If a partner chooses to send in a Price and Availability or Order Entry request using ManufacturerPartNumber as the request criteria there is a small chance (specifically with Licensing items) that there may be multiple IM skus mapped to a single ManufacturerPartNumber, if this is the case for the criteria being specified IM will return an error message to the partner communicating this and requesting partner to resubmit their request specifying the correct IM sku.

If a customer chooses not to implement these recent updates that we have made to our IM-XML functionality they can continue to request and receive the same data sets by continuing to use the element **<ShowDetail> = 0 or 1**.

Additional Order Entry Options

We have added some additional options / elements in the Order Entry transactions that will allow our partners to send in some additional settings on their orders which will give our partners further control on how orders behave when they are sent into the IM system. The additional options that we added to the Order Entry transaction are all detailed in the documentation below, all new options / elements are highlighted in blue. Specifically the new options / elements that we have added are:

Ship From Branch At Line – this enhancement will allow our partners to request product shipment from a specified branch at the line level. Specifically if a partner specifies **<ShipFromBranchAtLine>** at the line level on an order this will override the **<ShipFromBranches>** option if specified at the header level of the order. If **<ShipFromBranchAtLine>** is not specified at the line level on the order then the **<ShipFromBranches>** at the header level of the order will determine the shipment branch options when the order is created within the IM system. If neither **<ShipFromBranches>** or **<ShipFromBranchAtLine>** is specified the IM system will determine the warehouse allocation based on a partner's account settings.
Important Note: Ship From Branch At Line is not an applicable feature when sending through the D-Type (licensing/warranty) order entry transaction.

Kill Order After Line Error – this enhancement will allow our partners the ability to specify that if an error occurs at a line level on an order that the entire order is to be rejected by the IM system. If the **<KillOrderAfterLineError>** is set to "Y" this

behavior will occur. For example if on an order a partner specifies <KillOrderAfterLineError> = Y and <BackOrderFlag> = N and if on the order there is an item that is not in stock in any of the IM branches, this combination of settings and backordered line item would be considered an error at the line and the entire order would be rejected by the IM system. This logic is also often referred to as “Fill or Kill logic”.

Requested Delivery Date – this enhancement is to allow our partners the ability to request a Delivery Date for order shipment.

Important Note: This functionality is not currently supported with North America partners.

Requested Price (Price Variance) – this enhancement will allow a partner to send in a <RequestedPrice> at the line level on an order. This new enhancement was programmed to allow our partners to send in a <RequestedPrice> at the line level of an order. It is specifically designed to accept or reject small pricing discrepancies on items between the partner and IM. The functionality is based on Price Variance settings that are setup at the IM account number level by the associated IM sales team. As mentioned, the logic allows a partner to send over a <RequestedPrice> at the line level on an order, if the specified price falls within the Price Variance settings of their IM contract price the order will be accepted.. If the <RequestedPrice> specified on an item falls outside the Price Variance settings of their IM contract price then the line will be rejected by the IM system.

Important Note :

This enhancement is not to be used by our partners to submit Special Bid type orders. It is only to be used to capture small pricing discrepancies between partner order requests and IM. This <RequestedPrice> tag should not be confused with the <RequiredPrice> tag that is applied with Special Bid type orders.

If you are interested in implementing the <RequestedPrice> Price Variance functionality you must first contact your dedicated IM sales team. Also, if you have any questions in regards to implementing Price Variance please contact your dedicated IM sales team.

CustomOrderPersist – CustomOrderPersist Name and Value pairs allow partners to pass order level partner defined data at order entry, which will then be echoed back in the IMXML Order Detail response, upon Order Detail Request. The data will not appear anywhere else (EX: Invoice, shipping docs etc.).

If at any time a partner has questions or concerns in regards to this increase in data they can reach out to our ECS-Buffalo team (1-800-616-4665) / electronic.services@ingrammicro.com.

Newly Introduced transactions (Invoice / ASN):

Invoice and ASN (Advanced Shipment Notification) are different from most other IM-XML transactions because they are sent to the customer when certain events occur to

an order within the IM system. This means that once configured, the customer does not need to request an invoice or ASN because they will be sent automatically. The XML Invoices are sent during batch processing whereas the ASN is sent throughout the day when shipment of an order occurs. Both the Invoice and ASN transactions are also different from most other IM-XML transactions in that they are based on a “push” technology. Both the Invoice and ASN transactions are IM-XML transactions that IM pushes out to a partner’s URL address at the time they become available from the IM system.

What is happening with Version 1.0?

IM-XML version 1.0 will be available to all customers for the foreseeable future. A large amount of customers across Canada /US use version 1.0 in production every single day and there are no current plans to decommission the use of it. It is expected that quite a high proportion of customers will upgrade to version 2.0 as the benefits outweigh the work effort.

This document now offers a technical guide for IM-XML version 2.0. The documentation for IM-XML version 1.0 is still available. If you have any questions in regards to upgrading from version 1.0 to version 2.0 you can reach out to our ECS-Buffalo team (1-800-616-4665).

Useful Information

IP Addresses and URLs

External Admin Site for testing and tracking orders:

<https://coronado.ingrammicro.com/imxml/login.jsp>

IM-XML load balanced URL to post documents to –

<https://newport.ingrammicro.com>

The External Admin Site is used for:

Testing: sending through your test transactions

Tracking orders

Setting up additional accounts

Transaction log search

Transaction log counts

For more details and instructions on how to complete testing please see the *Testing Procedure* section of this Guide.

IM-XML load balanced URL

This is the URL to use to send XML transactions to Ingram Micro

Using an HTTP – POST command. The Request Document is sent as the request body. This method does not require the client to install certificates in order to use encryption -- just like using a web browser to connect using HTTPS to a web server doesn't require you to install a certificate on your machine.

Data Formats

The *currency* format used within IM-XML can depend on the trading partner setup but in most cases is as follows:

American 99.99

The *date* format used within IM-XML is:

YYYYMMDD

US Carrier Codes (for USA partners)

Standard carrier codes for each country apply. For details of the service that is provided by the carrier or to discuss alternative options please contact your local

Ingram Micro Sales Representative. For the lowest priced ground carrier code please leave blank.

LTL Regional and Long Haul Carriers		
Carrier Code	Carrier Name	Branches
AB	ABF	ALL
AT	AIM Transport	10
AV	Averitt Express	20,30,40
CA	Saia (Westex)	10
CE	Central Freight Lines	10, 20, 30, 40
CT	Comet	17
FB	Fox Brothers	40
KR	K&R Express	30, 40
NP	New Penn	80
NO	Nomad	20
PT	Pitt Ohio	80
R1	AIT Freight Service (<i>RACKs ONLY</i>) Customer Pays Freight (B in Frt Out)	ALL
Z9	Saia	17, 20, 30
S1	WRDS	10
TR	USF Reddaway	10
WK	Watkins	ALL

Air Carriers		
Carrier Code	Carrier Name	Branch
A1	Airborne Overnight AM	ALL
A2	Airborne Two Day	ALL
AO	Airborne Overnight PM	ALL
AS	Airborne Saturday 1 Day	ALL
F1	FedEx Priority Overnight	ALL
FO	FedEx Standard Overnight	ALL
F2	FedEx Two Day	ALL
FS	FedEx Saturday 1Day	ALL
FW	FedEx Saturday 2 Day	ALL
UO	UPS Overnight	ALL
UR	UPS Red One Day	ALL
UB	UPS Blue Two Day	ALL
U3**	UPS Three Day	ALL
US	UPS Saturday	ALL

** Service is 'Bill Only'

Heavyweight Air Carriers		
Carrier Code	Carrier Name	Branch
EP	Eagle Air Priority One	ALL
EN	Eagle Air Standard Overnight	ALL
ET	Eagle Air Two Day	ALL
EE	Eagle Three Day	ALL
L1*	Lynden One Day	10, 20, 30, 80
L2*	Lynden Two Day	10, 20, 30, 80
L3*	Lynden Three Day	10, 20, 30, 80
OA	AIT Overnight	ALL
TA	AIT Two Day	ALL
H3	AIT Three Day	ALL

	*Alaska and Hawaii shipments	
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Ground Carriers		
Carrier Code	Carrier Name	Branch
FG	FedEx Express Saver	30
RG	FedEx Ground (<i>formerly RPS</i>)	ALL
UG	UPS Ground	ALL
G2	UPS Ground + one additional transit day	ALL

Preferred International Carrier		
BI	Bax Global	BIF
GI	Eagle Global Logistics	GIF
FI	Federal Express	FIF
DI	DHL International	DIF
EI	DHL Heavyweight FCA	DAF
UI	UPS International	UIF
VI	UPS Ground to Canada	UGC

Puerto Rico Carrier Codes		
Carrier Code	Carrier Name	Default FF Code
FI	Federal Express*	FIF
* Carrier code is not specific to service option. Comment line must be added to indicate 1 day, 2 day, etc.		
UR	UPS Next Day	UIN
UB	UPS Second Day	UIS
PI	Caribbean Transport - 1 Day	CBF
QI	Caribbean Transport - 2 Day	CBS
RI	Caribbean Transport - 3 Day	CBT
SI	Caribbean Transport - 4-5 Day	CBD

Canadian Carrier Codes (for Canadian partners)

Standard carrier codes for each country apply. For details of the service that is provided by the carrier or to discuss alternative options please contact your local Ingram Micro Sales Representative.

A3	PUROLATOR AIR 10 30	OT	OTHERS
A9	PUROLATOR AIR 9AM	P3	PUROLATOR 10 30
AP	APPS CARTAGE	P4	PUROLATOR US BR 40
AT	ATS TRANSPORT	P9	PUROLATOR 9AM
AW	PUROLATOR AIR WEEKEND	PA	PUROLATOR AIR
BO	BACKORDER	PI	PUROLATOR GROUND
BT	BYERS TRANSPORT	PL	PUROLATOR LATE
CD	F S CROSSDOCK	PW	PUROLATOR WEEKEND
CF	CONFIGURATION LAB	RG	SEE ROUTING GUIDE
CT	CONCORD	S1	SLH (ALBION)
DN	DYNAMEX ND	S2	SLH (MONTREAL)
DR	DAY AND ROSS	S3	SLH (UNDERHILL)
DX	DYNAMEX SD	S4	SLH (HQPOW)
EN	Expedited Parcel No Signature)	S5	SLH (SMART REGINA)
FN	FASTAIR ND	S6	SLH (SMART BELLEVLE)
FS	FASTAIR SD	T7	PREMIER 7AM
IX	INGRAM EXPRESS	T9	PREMIER 8 30AM
L1	LRM NOW	TP	PREMIER 10 00AM
L2	LRM HOT	TT	TOTALLINE TRANSPORT
L3	LRM RUSH	U8	UPS 8AM
LA	LOO AIR	UC	UPS PPC ONLY
LG	Lomis Ground	UG	UPS GROUND
M1	MIDLAND COURIER	UN	UPS EXPRESS
MA	MANITOULIN	UR	UPS RED
MC	MIDLAND COURIER	WC	WILL CALL
MR	MEC RUSH	WY	PARCELWAY
MS	MEC SUPERRUSH		Xpresspost(No Signature)
MT	MIDLAND TRANSPORT		XN

Support Procedure

In the event of an issue or a query that may arise before, during and after the integration of the IM-XML program the support procedure is as follows:

Trading Partner Procedure:

Step 1. Verify that your query cannot be answered by the IM-XML FAQ document that is located in the download section of the administration web site.

Step 2. Verify that the fault is not a data entry issue and that all data submitted is correct.

Step 3. If document posting related, ensure that the transaction log viewable from the admin site is checked, as this may reveal the answer. This is because the transaction log can store more details on failed transactions.

Step 4. Collect as much information as possible on the issue, date, time, loginID and password, error message, etc and keep a record of this.

Step 5. Contact the ECS-Buffalo team. They can be reached at 1-800-616-4665 / electronic.services@ingrammicro.com

IM-XML Administration Tool

-The web-based administration tool is available to registered users and will be the central IM-XML reference point for Ingram Micro's Trading Partners. It is designed to act as a supportive environment that will provide the following features:

-Testing of IM-XML documents using a simple cut, paste and submit format. This allows IM-XML documents to be tested quickly and easily

-Transactions logs can be viewed, allowing historical searching, sorting and reporting of data

-Standard reports can be generated and exported such as transaction reports

-Site activity can be viewed, allowing registered users to track changes made to profiles, passwords

-New users can be added. User profiles and restrictions can be configured to allow specific access rights to specific transactions and areas of data

-New documentation can be downloaded. The IM-XML administration site will be where all new information will be available for download

-Performance of the tool (average response times) can be viewed
<https://coronado.ingrammicro.com/imxml/login.jsp>

-A valid admin login ID and password are required

Testing Procedure:

All tests should be performed against Ingram Micro's production environment.

When placing test orders, please follow these steps to ensure that your orders are not released:

Advise your Ingram Sales representative in advance of placing any test orders. Place your orders on an Ecommerce Customer HOLD, by indicating 'H' as the Autorelease value (Note: Dtype Order Requests don't contain the Autorelease element, however, these orders will trigger another HOLD in our system automatically.)

Specify the CustomerPO as "TEST PO ONLY – DO NOT SHIP"

Indicate within order on a Comment Line that the order is only a test. For example
<CommentText>TEST PO ONLY – DO NOT SHIP</CommentText>

Communicate any test orders to your IM Sales Representative, so that these are not shipped and can be voided.

The following SKUs may be used for testing.

USA Partners
SKU: TSXML3 This sku is stocked and will have stock in all 5 ALCs.
SKU: TSXML1 This sku will have 0 stock available in any of the ALCs
SKU: TSXML2 This SKU has a product class code of “X”(Directship). SKUs with this class code can only be ordered via the Dtype Order Request xml transaction. Licensing and warranty products are examples of class X SKUs.

Canadian Partners
SKU: 21593L This sku is stocked and is in stock.
SKU: 21592L This sku will have 0 stock available in any of the ALCs
SKU: 21594L This SKU has a product class code of “X”(Directship SKUs). SKUs with this class code can only be ordered via the Dtype Order Request xml transaction. Licensing and warranty products are examples of class X SKUs.

Elements/Data Explanation

The specification for the Transactions Elements and the data they may contain is shown in the tables below marked Elements/Data Description. To understand how this works, a brief explanation of XML Element tags and nesting is required.

XML Elements and Nesting:

- Each Element consists of an opening and a closing tag.
- Anything placed between these tags is said to be contained by those tags.
- Additional information within an Element's opening tag is called an Attribute.
- Each Element may contain data.
- Each Element may contain 1 or more additional Elements, called child Elements.
- Each of the child Elements are said to be contained or nested within a parent Element.
- Each child Element may itself be a parent Element, thus the nesting can be on more than 1 level.

In the Data Description tables whenever an Element is a parent Element, both it's opening and closing tags are shown to indicate what the child elements are. Each table has the following headings.

Element – Gives the opening and closing tags of the Element. Closing tags are not shown if the Element has no children.

Description – Describes the Elements function

Parent Element – Indicates the parent Element of this child.

NL – Indicates the Nested Level, i.e. how far within the Parent/Child tree the Element resides. NL helps to indicate which Elements are grouped together. 'A' indicates this is an Attribute, not an Element.

Min/Max Occurrences – Indicates the number of times the Element can be repeated, and whether the Element is compulsory. If an Element is not compulsory do not provide this in the XML message unless required. This only applies within the scope of the parent Element, i.e. a compulsory child is only compulsory if the parent Element is a part of the XML message. * indicates that an element can occur many times.

Data Type – If the Element contains data, this indicates the type of data that is accepted.

Min/Max Length – Indicates any constraints on the data.

Example Data – Provides an appropriate example of the data required.

Highlighted text – Occasionally a group of Elements will be highlighted. This indicates that their parent Element can either contain the highlighted child Elements OR the non-highlighted child Elements, but not both.

Transaction Header – Applies to all transactions

Description

The Transaction Header forms the basis of all transactions and must be used in conjunction with the main body of a transaction. It occurs after the transaction and version have been declared.

It contains data that links transactions to unique accounts within specific countries.

As the TransactionHeader section appears in all request and response documents, it will only be mentioned at this point in the documentation.

Transaction Header Request Notes:

SenderID can be used to identify the sender of the transaction

ReceiverID can be used to identify the receiver of the transaction

CountryCode is used to identify the country in which the order is to be placed

'MD' = USA not 'US'. Enter 'MD' for USA

'FT' = CA not 'CA'. Enter 'FT' for Canada

LoginID used for unique customer login identification

Password used for unique customer password identification

TransactionID can be used by the customer to assign a unique transaction identification number

Transaction Header Response Notes:

The response document contains a further 2 elements and 1 attribute. The usage of this is illustrated in each transaction example.

ErrorStatus contains a unique description according to the type of error

ErrorNumber is an attribute of ErrorStatus that contains a unique error number according to the type of error

DocumentID contains a GUID (GlobalUniqueIdentification) generated by Ingram Micro that can be used for message tracking purposes

The ErrorStatus element and ErrorDescription attribute of this element will be populated only if the transaction fails to complete successfully, otherwise they will be left blank.

Synchronous Order Request Transaction

Description of Transaction

The Order Request transaction is a real-time transaction that allows customers to place standard product orders with Ingram Micro using XML.

Note: License / Warranty type orders where the End-User details are required by the Vendor should not be processed using this transaction. Orders for License / Warranty product should be placed via the Dtype Order Entry transaction. We identify SKUs that must be processed via the Dtype Order Entry transaction with a class code of “X”. If Class Code is not included in your FTP Price file, you can request that it is added by contacting 1-800-616-4665.

High-level description of Ingram Micro’s distribution cycle:

Order creation – where all the processing parameters are set. Validation is mostly on shipping address, product authorization, and stock allocation.

Sales validation – orders may be put on a sales hold if any sales revision is required due to pricing, stock or any processing parameters.

Credit validation – once the order has been validated at sales, it goes through a credit check. If credit is available the order will process without issue.

Warehouse pick and ship – here is where the physical stock is pulled from the different warehouse locations and sent to the delivery bay for collection by the carrier. All of the shipment information is created at this stage (packing slips, tracking numbers, serial numbers).

The order request transaction specifies typical order information such as who to ship to, where to ship to, which carrier to use for the shipment, what order processing logic should be used, what products, the required quantity of the products and many other key pieces of information.

It follows no other logic than that which the customer specifies, but a unique feature of IM-XML actually allows more flexibility than many standard-ordering tools. For example: IM-XML allows the customer to place an order in the morning, add product lines, delete product lines, change quantities, change address details and then release the order at a later stage. This can all be achieved with the comfort of knowing that the very second that the initial order is placed; the stock has been allocated for your order and cannot be allocated to anybody else’s order. This offers the customer a highly sophisticated ordering tool with a huge amount of flexibility.

To explain this feature further:

The order can be placed using one of two options, ‘*finalize*’ or ‘*finalize and release*’.

To *finalize* (AutoRelease set to 0) an order means that it has been placed onto Ingram Micro's system and stock (where available) will be allocated to the order. This order will remain on hold unless otherwise instructed until the end of the business day. If stock is not available at that time, the backordered line enters in the product allocation queue.

To *finalize and release* (AutoRelease set to 1) an order means that it has been placed onto Ingram Micro's system, stock (where available) will be allocated and the order will continue through the distribution cycle.

This feature is enabled by using the AutoRelease element and can be found in the Processing Options Section below.

Version 2.0

The amount of detail that the Order Request response provides has been enhanced for version 2.0. The changes can be clearly seen by the pale yellow coloring in the response table. All uncolored rows are available through version 1.0.

Start of Order Header Information Section

The order header section allows the customer to specify where and how the order should be shipped. The customer may specify the desired carrier, the auto release flagging and the back order settings among others. The option combination selected determines the number of order shipments and the ease with which the order can be filled at the requested quantities.

BillToSuffix refers to the location or flooring company that the invoice amount should be billed to. This is only valid for customers that have specific bill to suffix accounts. If a customer's account does not have any further billing accounts, the default of '000' should be sent.

Start of Addressing Information Section

CustomerPO refers to the customers purchase order number that applies to the order. IM can carry the customers purchase order number through the distribution cycle, so that it can be used to identify the order.

ShipToAttention May be used to identify a specific person or department to deliver the item requested to. It may be blank.

EndUserPO refer to the end users purchase order number that applies to the order. This element will only apply if Ingram Micro is shipping the order on the customer's behalf, directly to the end user.

Start of Ship To Section

The ship to section can contain:

A full address, with up to 3 address lines, city, country and postal/zip code.

OR

A ship to suffix that identifies a regular alternate ship-to location. If the customer has various locations (i.e. multiple warehouses, multiple outlets) it is possible for Ingram Micro to assign a ship to suffix for each of those locations. This way the customer will not have to enter all of the ship to information every time they want to ship to one of them.

It is not possible to use both of these addressing options within a single order request; one or the other must be used.

OR

No ship to information at all. If the order transaction is sent with all ship to elements removed, the order will automatically use the default ship-to address stored in Impulse (Ingram's internal system). If an order is sent with blank ship to elements, the order will fail as it must be sent without the ship to elements for this feature to work

Full Address Option

Start of Address Section

ShipToAddress1 Must contain a company name or the name of a specific person to deliver to.

ShipToAddress2 Specify the street address required for delivery.

ShipToAddress3 refers to the third line of the delivery address. Specify additional Ship To address info (Ex: unit number, Apt number, Buzzer Number)

ShipToCity refers to the city or town that is required for the delivery address.

ShipToProvince refers to the state or province in which the delivery address resides. Reference ISO codes.

ShipToPostalCode refers to the postal/zip code that is required for the delivery address. Postcodes are validated and incorrect postcodes will result in the order not being placed.

It is not possible to place orders for any country other than the country in which the customer resides. Attempting to place an order for an alternative country will result in

the order not being placed. This will happen regardless of whether the address is a valid alternative country address.

End of address section

Ship To Suffix Option

Start of Suffix Section

ShipToCountryCode refers to the country in which the delivery address resides. This should always be the ISO country code. (EX: 'US' for USA and 'CA' for Canada.)

ShipToSuffix refers to an Ingram Micro account suffix that will automatically use the delivery address as defined on that account.

End of Suffix section

End of Ship To Section

End of Addressing Information section

Start of Processing Options Section

CarrierCode refers to the carrier service that has been selected for use when delivering the stock from Ingram Micro to the customer. Each customer will need a list of valid carrier services for their account.

If no carrier code is sent, the order will be placed using the customer default carrier service that will be previously agreed with Ingram Micro. In cases where Ingram is expected to pay the freight charge, please do not specify a carrier code.

AutoRelease refers to the processing options that determine whether the order should be processed for shipping with or without further intervention.

There are three auto release options are available:

0 -Do not auto release. Order will not be released for processing and shipping and will remain on IMpulse until the end of the business day at which point it will be released. It is possible to release the order using the Order Change IM-XML transaction (see below).

1 -Allow auto release. Order will be automatically released for processing and shipping. Once released, the order cannot be changed.

H -Do not auto release and remain on hold for extended period, based on contractual agreement. Order will not be released for processing and shipping and will remain in IMpulse until the end of the following business day. It is possible to release the order using the Order Change IM-XML transaction (see below). If no action is taken to release the order, the lines on the order will eventually void automatically.

Auto release is an optional element. Not specifying a value or excluding the element will result in the order being set to 1 (allow auto release).

ThirdPartyFreightAccount refers to a third party freight account number for charging freight against. The account number should be passed within this field and the appropriate carrier code should be supplied within the carrier code tags. Prior to sending your request containing the third party account number, it must be first entered into our system. Your Ingram Micro Sales Representative can action this for you. *Note: USA partners- For FedEx Air only (carrier codes F1, FO, F2, FG.), please send three leading zeros before your thirdPartyFreightAccount number (i.e: 000999999999.)*

KillOrderAfterLineError this is a setting that a customer can use to setup a type of “Fill or Kill” logic on their order. If this flag is set to “Y” then it will tell the system to cancel the entire order if there has been an error occur at the line level on the order. If this flag is set to “N” and there is a line level error on the order then the order will be accepted with amendments, meaning the order will be accepted minus the line which contains the error(s). An error at the line level could be an item which is not permitted for back order, an invalid order criteria item, an invalid warehouse, etc.

The KillOrderAfterLineError is an optional element.

Start of Shipment Options Section

BackOrderFlag refers to the processing options for an order when stock is not available for allocation. These are items that are not currently in stock at an Ingram Micro warehouse.

Four Backorder processing options are available:

Y - Allow back orders and ship as inventory becomes available (possible multiple shipments).

N - Do not allow back order. It will not be possible to order a product from a warehouse if it lacks the total requested quantity. In addition, depending on the split shipment option selected, the order line may be rejected.

C - Allow back orders but ship when all products become available at the warehouse. This forces the order to remain on sales hold, waiting for all of the products to have stock allocated and trigger a complete single shipment. If all requested stock is available for immediate allocation, the order will release automatically.

E - Complete order. This is similar to the ‘C’ option, but for multiple warehouses. The order will not be shipped until all products from all warehouses become available.

When products are backordered and multiple shipments have been allowed (BackOrderFlag set to ‘Y’) Ingram Micro will generate a distribution count for the order called an order suffix.

High Level Order Suffix Description:

Standard order:

40-48043-11 stands for OrderBranch-OrderNumber-DistributionCount

Order with multiple shipments and products on backorder: as seen before (with the BackOrderFlag set to 'Y'), this will generate a distribution count, which would result in two order numbers.

40-12345-11 This represents the Ingram Micro order number for the first shipment of stock

40-12345-12 This represents the Ingram Micro order number for the second shipment of stock. This occurs if the total required stock was not available for the initial shipment.

Order with all products on back order: it will only generate one distribution count. We can see 3 scenarios as some stock becomes available.

With the BackOrderFlag set to 'Y' the first shipment will keep the -11 order suffix, and the rest of backordered products will be moved to the -12 suffix.

With the BackOrderFlag set to 'C' all lines will stay on the -11 suffix until all of the stock from the warehouse can be allocated.

With the BackOrderFlag set to 'E', all the lines will stay on the -11 suffix and only one shipment will take place, which is when all stock from all warehouses becomes available.

SplitShipmentFlag refers to the processing options for an order that will allocate stock from more than one warehouse. This option is only applicable in countries where more than one stocking warehouse is available to allocate stock to orders.

Two split shipment processing options are available:

Y Allow split shipments. The order will be sourced from any available warehouses checking the default ship-from warehouse first. This option does not guarantee a single order shipment.

N Do not allow split shipments. Orders will not check for stock anywhere other than the default warehouse.

While an order may be split among a number of warehouses, each order line cannot be split (unless specified, see below) and is always sourced from a single warehouse. A reference warehouse number is returned in the New Order Request Response area on order creation.

SplitLine refers to the processing options for an order that will allocate stock to an order line from more than one warehouse. This option is only applicable in countries where more than one stocking warehouse is available to allocate stock to orders.

Two split line processing options are available:

Y Allow split lines. This will allow any quantity of any order line to be shipped if the stock is available.

N Do not allow split lines. This will not allow any quantity of any order line to be shipped until the entire quantity of that order line is available.

ShipFromBranches refers to the Ingram Micro warehouse branch number that the stock should be shipped from.

USA Branches (for USA partners)

Branch #	Location
10	Mira Loma, CA Distribution Center
20	Carrollton, TX Distribution Center
30	Millington, TN Distribution Center
40	Carol Stream, IL Distribution Center
80	Jonestown, PA Distribution Center

Canadian Branches (for Canadian Partners)

Branch #	Location
40	Mississauga, ON Distribution Center
10	Vancouver, BC Distribution Center

If inventory is insufficient to fill the desired quantity at that warehouse, the order line will be either backordered (BackOrderFlag = Y or E) or rejected (BackOrderFlag = N).

If no warehouse is designated for the order, Ingram will choose the branch to ship the order from (in most cases the closest branch to the destination).

USA ONLY: Note: If the BackOrderFlag=N and no ShipFromBranch is designated; only the warehouse that is closest to the shipping destination will be checked for stock. Orders would be rejected or accepted according to availability within this ShipFromBranch only.

CANADA ONLY- Note: If the BackOrderFlag=N and no ShipFromBranch is designated; only your account's default ShipFromBranch will be checked for stock. Orders would be rejected or accepted according to availability within this ShipFromBranch only. Your IM Sales Representative can tell you the default ShipFromBranch that is assigned to your account.

DeliveryDate references a requested Delivery date for order shipment.

Important Note: This functionality is not currently supported in North America.

End of Shipment Options Section

End of Processing Options Section

DynamicMessage refers to an option that becomes available to customers that have chosen to use the Ingram Micro service for Personalized Delivery. The Dynamic Message option will allow the customer to personalize the shipping documentation. For further information the customer should talk to an Ingram Micro eSolutions associate.

Government refers to the ability to order Gov/Ed products via XML. These tags are active only for USA partners at this time.

USA Partners ONLY:

An order can contain both regular products and Gov/Ed products and if there are no special pricing on the ordered sku, Impulse will use the regular price. Please note that ALL of the tags that are related to the Gov/Ed orders are mandatory.

1) **GovProgramType** = 'PA' = GOVERNMENT – 'ED' = EDUCATION -

2) **GovEndUserType** = GOVT = 'F' 'S' 'E' - ED = 'K' 'H'

F = Federal

S = State

E = Local

K = K-12 school

H = Higher Education

3) **GovSolicitationNBR** = GOV - ED CONTRACT NUMBER

4) **GovEndUserData** = EXAMPLES STATE OF OHIO, CHICAGO SCHOOL DISTRICT ETC

5) **GovEndUserZip** = 9 CHAR FIELD / ZIP CODE OF END USER OF ORDER

6) **GovPublicPrivateSW** = DETERMINES TAX / NO TAX.

'P' PUBLIC SECTOR 'R' PRIVATE SECTOR. Value needs only to be provided for EDUCATION orders

Canadian Partners:

Canadian partners can place their Govt/Ed orders on a hold (autorelease=H) and pass Govt/Ed related info within the comment lines of the orders. This should be discussed with your IM Sales Representative in advance as they will need to process these orders.

CustomOrderPersist:

CustomOrderPersist Name and Value pairs allow partners to pass order level partner defined data at order entry, which will then be echoed back in the IMXML Order Detail response, upon Order Detail Request. The data will not appear anywhere else (EX: Invoice, shipping docs etc.).

Start of Order Line Information Section

The order line section can contain multiple instances of the product line section.

Start of Product Line Section

SKU refers to the Ingram Micro **S**tock **K**eeping **U**nit.

Quantity refers to the requested quantity of the SKU.

CustomerLineNumber refers to the line number on the customer's original order. This means that Ingram Micro can carry the customer line numbers through the distribution cycle allowing the customer to maintain their order integrity.

Start of Reserved Inventory Section

The reserved inventory section allows the customer the ability to allocate stock from their reserved inventory (if pre-allocated customer reserved inventory is applicable) instead of allocating product from Ingram Micro's standard inventory. Reserve inventory is available by agreement only. If a partner has questions or is interested in subscribing to the reserved inventory program with IM please contact your IM dedicated sales team.

ReserveCode This element is only relevant for partners that are enrolled in Ingram's Reserve Inventory program. Please contact your Ingram Micro Sales representative for information on the program and on enrollment.

Refers to the code required by Ingram Micro's system to identify the status type of the stock that has been reserved by the customer. The status type indicator is used to identify whether the stock is normal stock, constrained, large account program or priority. See PNA (Pricing and Availability transaction in this guide for more information).

ReserveSequence identifies the actual stock that has been reserved by the customer based on the reserve code that has been selected.

End of Reserved Inventory Section

Customer Part Number refers to the Reseller's Part Number. A partner can only use this element as order criteria if their internal Customer Part Number is mapped within the IM system. If a partner has questions in regards to whether their part number are mapped within the IM system or if a partner is interested in getting setup to map their internal part numbers within the IM system – please contact your IM dedicated sales team.

UPC code refers to the Universal Product Code for an item. Generally most IM SKU's have a unique associated UPC code. However in some instances (licensing products in particular) do not have an associated UPC code.

Manufacturer Part Number refers to the manufacture part number of a product. Every IM product has an associate manufacturer part number. In some instances (licensing products in particular) there may be multiple IM SKU's associated with one unique manufacturer part number. If this is the case for the manufacturer part number that a partner is using as the request criteria then our IM-XML system will send back an error message requesting that the partner specify the unique IM SKU.

Ship From Branch At Line refers to the Ingram Micro warehouse branch number that the stock at the associated line should be shipped from. If ShipFromBranchAtLine is specified it will override the ShipFromBranch at the header level of the order. If the ShipFromBranchAtLine is not specified then the ShipFromBranch at the header level of the order will take precedence. If neither element contains data then the account settings with the IM system will determine the ship from branch location(s).

Requested Price refers to new functionality that is based on Price Variance settings that are setup at the IM account number level by the associated IM sales team. The logic allows a partner to send over a RequestedPrice at the line level on an order, if the specified price falls within the Price Variance settings of their IM contract price the order will be accepted for review by the IM sales team. If the RequestedPrice specified on an item falls outside the Price Variance settings of their IM contract price then the line will be rejected by the IM system.

Important Note: *If you are interested in implementing the <RequestedPrice> Price Variance functionality you must first contact your dedicated IM sales team.*

End of Product Line Section

Start of Comment Line Section

The comment line section can be included after every product line section and allows the customer to add comments to the order after each line has been added. Regardless of where the comment lines are added in the order, all comment lines will appear at the end of the order on IMpulse. All comment lines sent to Ingram Micro will be printed on the documentation that is sent when the first shipment is sent to the customer. Any subsequent shipments will not contain the comments

CommentText refers to the ability to specify a specific message that is deemed necessary to be displayed on the order when received by Ingram Micro. This comment will be included on the packing slip that is sent with the delivery.

If you'd like to send comments that are viewable by Ingram Micro associates only, simply specify “///” before the comment (EX: “/// This is a test order”). Such comments will not be displayed on the packing slip.

End of Comment Line Section

ShowDetail allows the customer to control the level of detail that is required for the response. Two options are available:

- '0' will display the smallest amount of detail in the response document
- '1' will display the average amount of detail in the response document
- '2' will display the maximum amount of detail in the response document

<ShowDetail> = 2 must be specified in order to access the newly released IM-XML enhancements.

End of Order Request Section

Sample Document: OrderRequest

```

<OrderRequest>
  <Version>2.0</Version>
  <TransactionHeader>
    <SenderID>123456789</SenderID>
    <ReceiverID>987654321</ReceiverID>
    <CountryCode>FT</CountryCode>
    <LoginID>CA3833HHD</LoginID>
    <Password>Re887Jky52</Password>
    <TransactionID>54321</TransactionID>
  </TransactionHeader>
  <OrderHeaderInformation>
    <BillToSuffix />
    <AddressingInformation>
      <CustomerPO>CustomerPO_1</CustomerPO>
      <ShipToAttention>Mrs Jones</ShipToAttention>
      <EndUserPO>EndUserPO_1</EndUserPO>
      <ShipTo>
        <Address>
          <ShipToAddress1>Red House Company</ShipToAddress1>
          <ShipToAddress2>55 Elm Street</ShipToAddress2>
          <ShipToAddress3></ShipToAddress3>
          <ShipToCity>Toronto</ShipToCity>
          <ShipToProvince>ON</ShipToProvince>
          <ShipToPostalCode>SW1 3IM</ShipToPostalCode>
        </Address>
      </ShipTo>
    </AddressingInformation>
    <ProcessingOptions>
      <CarrierCode>PI</CarrierCode>
      <AutoRelease>0</AutoRelease>
      <ThirdPartyFreightAccount></ThirdPartyFreightAccount>
      <KillOrderAfterLineError>N</KillOrderAfterLineError>
      <ShipmentOptions>
        <BackOrderFlag>Y</BackOrderFlag>
        <SplitShipmentFlag>N</SplitShipmentFlag>
        <SplitLine>N</SplitLine>
        <ShipFromBranches>20</ShipFromBranches>
      </ShipmentOptions>
      <DeliveryDate>20090701</DeliveryDate>
    </ProcessingOptions>
    <DynamicMessage>
      <MessageLines>Please deliver to Mrs Jones</MessageLines>
    </DynamicMessage>
  </OrderHeaderInformation>
  <OrderLineInformation>
    <ProductLine>
      <SKU>123321</SKU>
      <Quantity>1</Quantity>
    </ProductLine>
  </OrderLineInformation>
</OrderRequest>

```

```

<CustomerLineNumber />
<ReservedInventory>
  <ReserveCode>C</ReserveCode>
  <ReserveSequence>01</ReserveSequence>
</ReservedInventory>
<CustomerPartNumber></CustomerPartNumber>
<UPC></UPC>
<ManufacturerPartNumber></ManufacturerPartNumber>
<ShipFromBranchAtLine>10</ShipFromBranchAtLine>
<RequestedPrice>25.00</RequestedPrice>
</ProductLine>
<CommentLine>
  <CommentText>Handle with care</CommentText>
</CommentLine>
</OrderLineInformation>
<ShowDetail>2</ShowDetail>
</OrderRequest>

```

Elements/Attributes Description: OrderRequest Element	Description	Parent Element	N L	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<OrderRequest>	Root element	-	0	1/1	-	-	-
<Version>	XML Version	<OrderRequest>	1	1/1	String	3/3	2.0
<TransactionHeader>	Contains transaction header information	<OrderRequest>	1	1/1	-	-	-
<SenderID>	Sender identification	<TransactionHeader>	2	1/1	String	0/18	123456789
<ReceiverID>	Receiver identification	<TransactionHeader>	2	1/1	Char	0/18	987654321
<CountryCode>	2 character ISO country code	<TransactionHeader>	2	1/1	Char	2/2	FT
<LoginID>	Customer specific login	<TransactionHeader>	2	1/1	Char	6/10	CA3833HHD
<Password>	Customer specific password	<TransactionHeader>	2	1/1	Char	6/10	Re887Jky52
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	2	0/1	Char	1/18	54321
</TransactionHeader>	Close of transaction header	<OrderRequest>	1	1/1	-	-	-
<OrderHeaderInformation>	Contains order header information	<OrderRequest>	1	1/1	-	-	-
<BillToSuffix>	Location or flooring company that the invoice amount is to	<OrderRequest>	1	0/1	-	-	-

	be billed to						
<AddressingInformation>	Contains order address information	<OrderHeaderInformation>	2	1/1	-	-	-
<CustomerPO>	Refers to the customer PO	<AddressingInformation>	3	1/1	Char	0/18	CustomerPO_1
<ShipToAttention>	You may identify here the person's name or department to deliver the shipment to. This may be sent blank.	<AddressingInformation>	3	1/1	Char	0/35	Mrs Jones
<EndUserPO>	Refers to the End User PO	<AddressingInformation>	3	0/1	Char	0/18	EndUserPO_1
<ShipTo>	Contains addressing information. Only use if shipping to non-default location.	<AddressingInformation>	3	0/1	-	-	-
<Address>	Ship to address information	<ShipTo>	4	0/1	-	-	-
<ShipToAddress1>	Must contain Company Name or identify the person's name to deliver the shipment to	<Address>	5	1/1	String	1/35	Redhouse Inc.
<ShipToAddress2>	Must contain the street address.	<Address>	5	1/1	String	1/35	55 Elm Street
<ShipToAddress3>	Specify additional ShipTo address info (Ex: unit number, Apt number, Buzzer Number)	<Address>	5	1/1	String	0/35	Unit 12
<ShipToCity>	Name of city	<Address>	5	1/1	String	1/21	Toronto
<ShipToProvince>	2 character ISO country code	<Address>	5	1/1	String	2/2	ON
<ShipToPostalCode>	Postal/zip code	<Address>	5	1/1	String	0/9	SW1 3IM
<ShipToCountryCode>	ISO Country Code	<Address>	5	0/1	String	0/2	CA
</Address>	Close of address	<ShipTo>	4	0/1	-	-	-
<Suffix>	Contains ship	<ShipTo>	4	0/1	-	-	-

	to suffix information						
<ShipToSuffix>	Identifies a store location or a distribution center to ship the order	<Suffix>	5	1/1	String	3/3	200
<Suffix>	Close of Suffix	<ShipTo>	4	0/1	-	-	-
</ShipTo>	Close of ShipTo	<AddressingInformation>	3	0/1	-	-	-
</AddressingInformation>	Close of AddressingInformation	<OrderHeaderInformation>	2	1/1	-	-	-
<ProcessingOptions>	Contains order processing options information	<OrderHeaderInformation>	2	1/1	-	-	-
<CarrierCode>	2 character carrier code	<ProcessingOptions>	3	0/1	String	2/2	CT
<AutoRelease>	Automatic order release options	<ProcessingOptions>	3	0/1	String	1/1	0
<ThirdPartyFreightAccount>	Contains 3 rd party carrier info	<ProcessingOptions>	3	0/1	String	0/12	542463
<KillOrderAfterLineError>	Fill / Kill Option Flag	<ProcessingOptions>	3	0/1	Char	0/1	N
<ShipmentOptions>	Contains shipment information	<ProcessingOptions>	3	1/1	-	-	-
<BackOrderFlag>	Back order processing options	<ShipmentOptions>	4	1/1	Char	1/1	N
<SplitShipmentFlag>	Split order shipment options	<ShipmentOptions>	4	1/1	Char	1/1	N
<SplitLine>	Split line options	<ShipmentOptions>	4	1/1	Char	1/1	N
<ShipFromBranches>	Ingram Micro warehouse branch codes	<ShipmentOptions>	4	1/1	String	0/14	20
<DeliveryDate>	Not currently supported in NA	<ShipmentOptions>	4	8/8	String	0/8	20090901
</ShipmentOptions>	Close of ShipmentOptions	<ProcessingOptions>	3	1/1	-	-	-
</ProcessingOptions>	Close of ProcessingOptions	<OrderHeaderInformation>	2	1/1	-	-	-
<DynamicMessage>	Personalised delivery customers only	<OrderHeaderInformation>	2	0/1	-	-	-
<MessageLines>	Message lines can contain the carriage return code – PD only	<DynamicMessage>	3	1/1	String	1/150	Please deliver to Mrs Jones

</DynamicMessage>	DynamicMessage close	<OrderHeaderInformation>	2	0/1	-	-	-
<Government>	Avail for USA only: Contains government order information	<OrderHeaderInformation>	2	1/1	-	-	-
<GovProgramType>	Avail for USA only: Government/education type of this order	<Government>	3	0/1	String	0/2	ED
<GovEndUserType>	Avail for USA only: Government/education end user type	<Government>	3	0/1	String	0/2	K
<GovSolicitationNBR>	Avail for USA only: Government/education contract number	<Government>	3	0/1	String	0/14	A5356
<GovEndUserData>	Avail for USA only: Government/education End User name	<Government>	3	0/1	String	0/25	State of Ohio
<GovEndUserZip>	Avail for USA only: Government/education ZIP number	<Government>	3	0/1	String	0/9	14221
<GovPublicPrivateSW>	Avail for USA only: Required for education orders (GOVT PROGRAM TYPE = ED); determines tax/no tax	<Government>	3	0/1	String	0/1	P
<Government>	Avail for USA only: Close of the government information	<OrderHeaderInformation>	2	1/1	-	-	
<CustomOrderPersist>	Enables partners to associate partner defined data with their order. The data will be passed back in their Order Detail response upon request. It will not show up	<OrderHeaderInformation>	2	0/*	-	-	-

	elsewhere.						
<NameValue>	Contain name/ value pairs for persisting data (see details above)	<CustomOrderPe rsist>	3	1/*	-	-	-
<Name>	Describes the value to be persisted	<NameValue>	4	1/1	String	1/50	WebOrderID
<Value>	The value to be persisted	<NameValue>	4	1/1	String	1/100	1234567
</NameValue>	Close of NameValue	<CustomOrderPe rsist>	3	1/*	-	-	-
</CustomOrderPersis t>	Close of CustomOrderP ersist Info	<OrderHeaderInf ormation>	2	0/*	-	-	-
</OrderHeaderInfor mation>	Close of OrderHeaderIn formation	<OrderRequest>	1	1/1	-	-	-
<OrderLineInformati on>	Contains order line information	<OrderRequest>	1	1/1	-	-	-
<ProductLine>	Contains product information	<OrderLineInfor mation>	2	1/*-	-	-	-
<SKU>	Ingrammicro product code	<ProductLine>	3	0/1	String	1/12	123321
<Quantity>	Number of stock units required	<ProductLine>	3	1/1	Int	0/*	001
<CustomerLineNumb er>	Line number may be used for customer internal reference	<ProductLine>	3	0/1	String	0/3	A12
<ReservedInventory>	Contains reserved Inventory information. Unless required and you are enrolled in the Reserve Inventory Program, do not specify.	<ProductLine>	3	0/1	-	-	-
<ReserveCode>	RI SKU Type. (Note: This is the ReservationCo de ID from the PNA response) C=Constrained G=General L=LAP – Large Account Program P=Priority	<ReservedInvent ory>	4	1/1	Char	1/1	C

<ReserveSequence>	Sequence number assigned to inventory	<ReservedInventory>	4	1/1	String	2/2	01
</ReservedInventory>	Close of reserved inventory	<ProductLine>	3	0/1	-	-	-
<CustomerPartNumber>	Customer Part Number (if applicable in IM system)	<ProductLine>	3	0/1	String	1/8	ABC12345
<UPC>	Universal Product Code (if applicable in IM system)	<ProductLine>	3	0/1	String	1/12	079856395124
<ManufacturerPartNumber>	Manufacturer Part Number	<ProductLine>	3	0/1	String	1/14	65ASDNHB2300256
<ShipFromBranchAtLine>	Ingram Micro warehouse branch codes	<ProductLine>	3	0/1	String	2/2	10,20,30,40
<RequestedPrice>	Partner requested price (if applicable to partner setup)	<ProductLine>	3	0/1	String	2/10	25.00
</ProductLine>	ProductLine close	<OrderLineInformation>	2	1/1	-	-	-
<CommentLine>	Contains comment line information	<OrderLineInformation>	2	0/1	-	-	-
<CommentText>	Allows text to be added after SKU's have been added	<CommentLine>	3	1/1	String	1/35	Handle with care
</CommentLine>	CommentLine close	<OrderLineInformation>	2	0/1	-	-	-
</OrderLineInformation>	OrderLineInformation close	<OrderRequest>	1	1/1	-	-	-
<ShowDetail>	Detailed / normal, increased response	<OrderRequest>	1	1/1	String	1/1	0,1,2
</OrderRequest>	OrderRequest close	-	0	1/1	-	-	-

Sample Document: OrderResponse

```

<OrderResponse>
  <Version>2.0</Version>
  <TransactionHeader>
    <SenderID>123456789</SenderID>
    <ReceiverID>987654321</ReceiverID>
    <ErrorStatus ErrorNumber=""></ErrorStatus>
    <DocumentID>{9D25E715-F65E-432F-A773-9E22FEA8FBDF}</DocumentID>
    <TransactionID>12345</TransactionID>
  
```

```

<TimeStamp>2003-07-07T00:00:00</TimeStamp>
</TransactionHeader>
<OrderInfo>
  <OrderNumbers>
    <BranchOrderNumber>2048043</BranchOrderNumber>
  <CustomerPO>2323232</CustomerPO>
  <ShipToAttention>ShipToAttention_1</ShipToAttention>
  <ThirdPartyFreightAccount></ThirdPartyFreight>
  <ShipToAddress1>Red House Company</AddressLine1>
  <ShipToAddress2>55 Elm Street </AddressLine2>
  <ShipToAddress3> </AddressLine3>
  <ShipToCity>Toronto</ShipToCity>
  <ShipToProvince>ON</ShipToProvince>
  <ShipToPostalCode>MK8 8DF</ShipToPostalCode>
  <ShipToSuffix></ShipToSuffix>
  <AddressErrorMessage AddressErrorType="" />
  <ContractNumber><ContractNumber>
  <OrderSuffix Suffix="11">
    <DistributionWeight>45</DistributionWeight>
    <SuffixErrorResponse SuffixErrorType="" />
    <Carrier CarrierCode="CT">CITY LINK NEXTDAY</Carrier>
  <LineInformation>
    <ProductLine>
      <LineError/>
      <SKU>123321</SKU>
      <ManufacturerPartNumber>50730</ManufacturerPartNumber>
    <UPC>0757120507307</UPC>
    <CustomerPartNumber>G0123456</CustomerPartNumber>
    <RequestedPrice>34.99</RequestedPrice>
    <UnitPrice>34.99</UnitPrice>
    <IngramLineNumber>020</IngramLineNumber>
    <CustomerLineNumber>Cus</CustomerLineNumber>
    <ShipFromBranch>20</ShipFromBranch>
    <OrderQuantity>10</OrderQuantity>
    <AllocatedQuantity>9</AllocatedQuantity>
    <BackOrderedQuantity>1</BackOrderedQuantity>
    <BackOrderETADate>12/07/2003</BackOrderETADate>
    <PriceDerivedFlag/>
    <ForeignCurrency>0</ForeignCurrency>
    <FreightRate>12.50</FreightRate>
    <TransitDays>1</TransitDays>
    <LineBillToSuffix>200</LineBillToSuffix>
  </ProductLine>
  <CommentLine>
    <CommentText>please deliver to grey door</CommentText>
    <CommentLineNumber>001</CommentLineNumber>
  </CommentLine>
</LineInformation>
</OrderSuffix>
</OrderNumbers>
</OrderInfo>
</OrderResponse>

```

Elements/Attributes Description: OrderResponse

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<OrderResponse>	Root element	-	0	1/1	-	-	-
<Version>	XML Version	<OrderRequest>	1	1/1	String	3/3	2.0
<TransactionHeader>	Contains transaction header information	<OrderRequest>	1	1/1	-	-	-
<SenderID>	Sender identification	<TransactionHeader>	2	1/1	Char	0/18	987654321
<ReceiverID>	Receiver identification	<TransactionHeader>	2	1/1	Char	0/18	123456789
<ErrorStatus>	Refers to the error description generated by the transaction. Blank if transaction was successful	<TransactionHeader>	2	1/1	String	0/100	ERROR: Login ID is invalid
ErrorNumber	Refers to the error number that has been generated by the transaction. Each error number is associated with a unique error message. Blank if transaction was successful	Attribute of <ErrorStatus>	A	1/1	String	0/10	20007
<DocumentID>	Unique ID generated by Ingram Micro	<TransactionHeader>	2	1/1	String	1/40	{9D25E715-F65E-432F-A773-9E22FEA8FBDF}
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	2	0/1	Char	1/18	12345
<TimeStamp>	Date and time of transaction (CET)	<TransactionHeader>	2	1/1	Char	1/19	2003-07-07T00:00:00
</TransactionHeader>	Close of transaction header	<OrderRequest>	1	1/1	-	-	-
<OrderInfo>	Contains order information	-	1	1/1	-	-	-
<OrderNumbers>	Contains order number information	<OrderInfo>	2	1/1	-	-	-
<BranchOrderNumber>	Ingrammicro order number	<OrderNumbers>	3	1/1	String	7/7	2048043
<CustomerPO>	Customer order number	<OrderNumbers>	3	1/1	String	0/18	2323232
<ThirdPartyFreight>	EU freight account #	<OrderNumbers>	3	1/1	String	0/12	11223344
<ShipToAddress1>	Company name or person to deliver to.	<OrderNumbers>	3	1/1	String	1/35	Red House
<ShipToAddress2>	Street Address	<OrderNumbers>	3	1/1	String	1/35	55 Elm Street
<ShipToCity>	Name of city / town	<OrderNumbers>	3	1/1	String	1/21	Toronto
<ShipToProvince>	2 character ISO country code	<OrderNumbers>	3	1/1	Char	2/2	ON
<ShipToPostalCode>	Post / zip code	<OrderNumbers>	3	1/1	String	0/9	MK8 8DF

<AddressErrorMessage>	Refers to the error description generated by the transaction. Blank if transaction was successful	<OrderNumbers>	3	1/1	String	0/100	Invalid zipcode
<AddressErrorTypeCode>	Refers to an error number generated by the address. Each error number is associated with a unique error message. Blank if transaction was successful	Attribute of <AddressErrorMessage>	A	1/1	String	0/10	20008
<ContractNumber>	Reserved for future use	<OrderNumbers>	3	1/1	String	0/30	DG883
<OrderSuffix>	Contains order suffix information	<OrderNumbers>	3	0/*	-	-	-
Suffix	Suffix number of the order	<OrderSuffix> attribute	A	1/1	String	2/2	11
<DistributionWeight>	Weight of the shipment	<OrderSuffix>	4	1/1	Int	1/5	45
<SuffixErrorResponse>	Refers to the error description generated by the transaction. Blank if transaction was successful	<OrderSuffix>	4	1/1	String	0/100	Invalid order
<SuffixErrorType>	Refers to an error number generated by the address. Each error number is associated with a unique error message. Blank if transaction was successful	Attribute of <SuffixErrorResponse>	A	1/1	Int	0/10	20014
<Carrier>	Carrier description	<OrderSuffix>	4	0/1	String	0/2	City Link Nextday
CarrierCode	Carrier code	<Carrier> attribute	A	0/1	String	0/2	CT
<LineInformation>	Contains product line information	<OrderSuffix>	4	1/*	-	-	-
<ProductLine>	Contains line level information	<LineInformation>	5	1/*	-	-	-
<LineError>	Line level error message	<ProductLine>	6	1/1	String	0/100	Invalid SKU
<SKU>	Ingram Micro product Code	<ProductLine>	6	1/1	String	1/12	123321
<ManufacturerPartNumber>	Manufacturer Part Number	<ProductLine>	6	1/1	String	0/14	65ASDN HB23002 56
<UPC>	Universal Product Code (if applicable in IM system)	<ProductLine>	6	0/1	String	0/12	07985639 5124
<CustomerPartNumber>	Customer Part Number (if applicable in IM system)	<ProductLine>	6	0/1	String	0/8	ABC1234 5
<RequestedPrice>	Partner requested price (if applicable to partner setup)	<ProductLine>	6	0/1	String	2/10	25.00
<UnitPrice>	Price of each unit	<ProductLine>	6	1/1	String	1/*	34.99
<IngramLineNumber>	Ingram Micro line number	<ProductLine>	6	1/1	Int	3/3	020

<ShipFromBranch>	Ingram Micro warehouse branch codes	<ProductLine>	6	1/1	Int	2/2	20
<OrderQuantity>	Quantity that was ordered	<ProductLine>	6	1/1	Int	1/*	10
<AllocatedQuantity>	Quantity that has been allocated to the order	<ProductLine>	6	1/1	Int	1/*	9
<BackOrderedQuantity>	Quantity that is on backorder	<ProductLine>	6	1/1	Int	1/*	1
<BackOrderETADate>	Date when backordered stock will arrive at Ingram Micro	<ProductLine>	6	1/1	String	0/*	YYYY-MM-DD
<PriceDerivedFlag>	Refers to price code	<ProductLine>	6	1/1	Char	1/1	A
<ForeignCurrency>	Foreign Currency amount – Applies only to Nordic countries	<ProductLine>	6	1/1	String	0/*	0
<FreightRate>	Amount of freight to be charged	<ProductLine>	6	1/1	Int	0/*	12.50
<TransitDays>	Transit calculation	<ProductLine>	6	1/1	String	1/1	1
<LineBillTOSuffix>	Line level bill to suffix	<ProductLine>	6	1/1	String	3/3	200
</ProductLine>	Close of product line	<LineInformation>	5	1/1	-	-	-
<CommentLine>	Contains comment information	<LineInformation>	5	0/*	-	-	-
<CommentText>	Comments that can be submitted to IMpulse	<CommentLine>	6	1/1	String	1/35	Please deliver at blue door
<CommentLineNumber>	Line number of the comment	<CommentLine>	6	1/1	Int	0/3	020
</CommentLine>	Close of comment section	<LineInformation>	5	1/1	-	-	-
</LineInformation>	Close of product line information	<OrderSuffix>	4	1/1	-	-	-
</OrderSuffix>	<OrderSuffix> close	<OrderNumbers>	3	0/*	-	-	-
<CustomOrderPersist>	Enables partners to associate partner defined data with their order. The data will be passed back in their Order Detail response upon request. It will not show up elsewhere.	<OrderHeaderInformation>	2	0/*	-	-	-
<NameValue>	Contain name/ value pairs for persisting data (see details above)	<CustomOrderPersist>	3	1/*	-	-	-
<Name>	Describes the value to be persisted	<NameValue>	4	1/1	String	1/50	WebOrder ID
<Value>	The value to be persisted	<NameValue>	4	1/1	String	1/100	1234567
</NameValue>	Close of NameValue	<CustomOrderPersist>	3	1/*	-	-	-
</CustomOrderPersist>	Close of CustomOrderPersist Info	<OrderHeaderInformation>	2	0/*	-	-	-
</OrderNumbers>	<OrderNumbers> close	<OrderInfo>	2	1/1	-	-	-
</OrderInfo>	-	<OrderResponse>	1	1/1	-	-	-
</OrderResponse>	Close of order response	-	0	1/1	-	-	-

An error response:

A few examples of possible error messages that could be generated when submitting Order Entry requests :

```
<TransactionHeader>
<
  <ErrorStatus ErrorNumber="20007">ERROR:
    LoginID, or Password or CountryCode is
    incorrect</ErrorStatus>
  <DocumentID>{0598CBDE-30B5-497E-9096-CAC5992D4AFD}
    </DocumentID>
  TransactionID>54321</TransactionID>
  TimeStamp>2001-07-16T17:25:58</TimeStamp>
</TransactionHeader>
```

```
<TransactionHeader>
<SenderID>ReceiverID_1</SenderID>
<ReceiverID>SenderID_1</ReceiverID>
<ErrorStatus ErrorNumber="20195">ERROR: Order Rejected-Manufacturer Part Number : DW4-
ABC123 found multiple IM SKUs.Please review DW4-ABC123 for correct IM SKU and resubmit
your order in its entirety using correct IM SKU for DW4-ABC123</ErrorStatus>
<DocumentID>{466A1523-488C-463E-BC72-DA4A46624D61}</DocumentID>
<TransactionID>TEST123</TransactionID>
<TimeStamp>2009-01-20T06:47:27</TimeStamp>
</TransactionHeader>
```

Notes:

If the transaction cannot be processed successfully <TransactionHeader> is the only element that will be populated and sent back to the client.

If transmission fails during the submission of an order, it is possible to retrieve the Ingram Micro Purchase Order number from the IM-XML administration website.

Asynchronous Order Request

Description of Transaction

Asynchronous Order Request allows the customer the freedom to place an order at any time of day or night regardless of the Ingram Micro batch processing times.

Conversely, the Synchronous version of Order Request provides an instant response, but orders cannot be placed when our system is unavailable (nightly).

The Asynchronous Order Request process is different from the normal Order Request process in the following ways:

When the order is received by Ingram Micro, an acknowledgement will be sent back immediately to the customer to prove receipt of the transaction. The Asynchronous Order Acknowledgement is a very short XML message. At this stage the order has not been entered into IMPulse. The order is entered in IMPulse as soon as possible.

The order will be entered as soon as IMPulse is available. This could be immediately or within several hours depending on the time of order placement

The order response is sent Asynchronously to the customer. The Asynchronous Order Response could be sent to the customer virtually immediately or within several hours depending on the time of order placement.

The Async Order Request and Response messages are identical to a Synchronous Order Request and Response V2.0 messages, EXCEPT for the version.

The Async Order response requires a listening script on the customers XML server to receive the response and to return an HTTP 200 message back to Ingram Micro

How to send Asynchronous Order Request:

See Synchronous Order Request for additional information. Differences are indicated below.

Step 1. Version number must be 2.5 in the Async Order Request, instead of 2.0

`<Version>2.5</Version>`

Step 2. Order acknowledgement must be accepted by the customer

Sample Document: Asynchronous Order Acknowledgement

```
<OrderAcknowledgement>
  <Version>2.5</Version>
  <TransactionHeader>
    <SenderID>987654321</SenderID>
```



```

<ReceiverID>123456789</ReceiverID>
<ErrorStatus ErrorNumber="" />
  <DocumentID>{833459ED-9B68-45D2-8E7D-4635279D6878}</DocumentID>
<TransactionID>54321</TransactionID>
<TimeStamp>2006-11-01T14:55:32</TimeStamp>
</TransactionHeader>
<OrderInfo>
  <CustomerPO>CustomerPO_1</CustomerPO>
  <EndUserPO>EndUserPO_1</EndUserPO>
</OrderInfo>
</OrderAcknowledgement>

```

Elements/Attributes Description: Asynchronous Order Acknowledgement

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<OrderAcknowledgement>	Root element	-	0	1/1	-	-	-
<Version>	XML Version	<OrderRequest>	1	1/1	String	3/3	2.5
<TransactionHeader>	Contains transaction header information	<OrderRequest>	1	1/1	-	-	-
<SenderID>	Sender identification	<TransactionHeader>	2	1/1	Char	0/18	987654321
<ReceiverID>	Receiver identification	<TransactionHeader>	2	1/1	Char	0/18	123456789
<ErrorStatus>	Refers to the error description generated by the transaction. Blank if transaction was successful	<TransactionHeader>	2	1/1	String	0/100	ERROR: Login ID is invalid
ErrorNumber	Refers to the error number that has been generated by the transaction. Each error number is associated with a unique error message. Blank if transaction was successful	Attribute of <ErrorStatus>	A	1/1	String	0/10	20007
<DocumentID>	Unique ID generated by Ingram Micro	<TransactionHeader>	2	1/1	String	1/40	{9D25E715-F65E-432F-A773-9E22FEA8FBDF}
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	2	0/1	Char	1/18	12345
<TimeStamp>	Date and time of transaction (CET)	<TransactionHeader>	2	1/1	Char	1/19	2003-07-07T00:00:00
</TransactionHeader>	Close of transaction header	<OrderRequest>	1	1/1	-	-	-
<OrderInfo>	Contains order information	-	1	1/1	-	-	-
<CustomerPO>	Customer order number	<OrderInfo>	2	1/1	String	0/18	2323232

<EndUserPO>	End user order number	<OrderInfo>	2	1/1	String	0/18	15151515
<OrderAcknowledgement>	Close of Order Acknowledgement	-	0	1/1	-	-	-

Step 3. Order response must be accepted by the customer

A listening script must be used to ‘receive’ the order response when Ingram Micro sends it to the customer. Ingram Micro uses a different IP address for sending requests to partners than we do for receiving requests. This new IP / URL must be registered by the customers firewall to allow messages to be received from Ingram Micro. Information is available on request from your local Ingram Micro eCommerce contact.

The Version number in the Async Order Response will be 2.5 instead of 2.0. Apart from that, the ASync Order Response is identical to the Sync Order Response.

See the Sync Order Request/Response and schemas for more details on this transaction.

Order Detail Transaction

Description of Transaction

This is a real time request that allows the customer to query Ingram Micro's IMpulse system for detailed information for a specific open or shipped order (in the last 18 months). Orders are searched using the Sales Order Number (BranchOrderNumber) and the Customer PO number (CustomerPO). A customer may optionally refine the search by sending the Order Suffix (OrderSuffix).

The possible status codes are listed below:

Order Status Messages Returned in the Order Detail Response	
Open Order	Open order
Customer Hold	Partner placed order on Ecom customer hold when they submitted their order via XML.
Sales Hold	A hold used when action is required by sales (Ex:Change pricing). IM will resolve.
Credit Hold	Some orders will go on credit hold. IM will resolve.
Order Printed	Time Stamped. Sent to Ship desk in the DC. It is printed at the DC for picking.
Released	Ship desk has reviewed. A pick ticket has been issued and it is in the process of being picked.
Picked	Rarely Seen
Inspected	Rarely Seen
Packed	Rarely Seen
Shipped	***Prepared for Shipping, but NOT yet shipped
Invoiced	Shipment has been tendered to the carrier. Serial Numbers were scanned.
Billed	Billed (For RMA, product received by Ingram)
Last box billed and shipped	Billed (In some cases this message will be returned in place of the Billed status)
Paid	Paid (For RMA, customer has used RMA credit)
Billing Error Order Status Messages	
The order may be given a billing error status by our system. This could happen if there is an issue with a sku (EX: if the sku has a cost or price of \$0). After the "INVOICED" stage and before the "BILLED" stage, if there is a billing error, you will see a status of "BILLING ERROR". Ingram will need to review and force bill. Once force billed, the status is "FORCE BILLED".	
Billing Error	Still Shipped
Shipped With Billing Error	Still Shipped
Forced Billed	Still Shipped
Contact IM- Possible problem	
The following indicate a possible problem. Contact your sales Rep to inquire on these statuses.	
Order not printed	Order Not printed; not set to print.

Bill For History	
Transferred	A warning message would trigger this message. Contact IM.
Tag Hold	
Pending	
Hold	Hold
Other Status Messages	
Order In Progress;Not Yet Finalized	You might get this if an Ingram Rep is making changes to the order at time of status call. Not yet finalized.
Unhandled Status	A catch all
Voided	Order cancelled.

Inbound XML Document

Root element Name: "OrderDetailRequest"

Sample Document: OrderDetailRequest

```

<OrderDetailRequest>
<Version>2.0</Version>
<TransactionHeader>
<SenderID>123456789</SenderID>
<ReceiverID>987654321</ReceiverID>
<CountryCode>FT</CountryCode>
<LoginID> UK3833HHD </LoginID>
<Password> Re887Jky52</Password>
<TransactionID>54321</TransactionID>
<TransactionHeader>
  <OrderHeaderInfo>
    <BranchOrderNumber>2048043</BranchOrderNumber>
    <OrderSuffix />
    <CustomerPO>CustomerPO_1</CustomerPO>
  </OrderHeaderInfo>
  <ShowDetail>1</ShowDetail>
</TransactionHeader>
</OrderDetailRequest>

```

Elements/Attributes Description: OrderDetailRequest

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<OrderDetailRequest>	Contains order detail	-	0	1/1	-	-	-
<Version>	XML Version	<OrderDetailRequest>	1	1/1	String	3/3	2.0
<TransactionHeader>	See Transaction Header	<OrderDetailRequest>	1	1/1	-	-	-
<SenderID>	Contains Ingram Micro Sender Identification	<TransactionHeader>	2	1/1	String	0/18	123456789
<ReceiverID>	Contains Customer / Vendor Identification	<TransactionHeader>	2	1/1	String	0/18	987654321
<CountryCode>	2 character country code ('MD' for USA, 'FT' for Canada)	<TransactionHeader>	2	1/1	Char	2/2	FT
<LoginID>	Customer specific login	<TransactionHeader>	2	1/1	Char	6/10	UK3833HHD
<Password>	Customer specific	><TransactionHeader	2	1/1	String	6/10	Re887Jky

	password	>					52
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	2	0/1	String	1/18	54321
</TransactionHeader>	Transaction Header Close	<OrderDetailRequest>	1	1/1	-	-	-
<OrderHeaderInfo>	Contains order header information	<OrderDetailRequest>	1	1/1	-	-	-
<BranchOrderNumber>	Ingrammicro branch and order number	<OrderHeaderInfo>	2	1/1	String	7/7	2048043
<OrderSuffix>	Ingrammicro order suffix number	<OrderHeaderInfo>	2	0/1	String	2/2	11
<CustomerPO>	Customer PO number	<OrderHeaderInfo>	2	1/1	String	1/18	Customer PO_1
</OrderHeaderInfo>	<OrderHeaderInfo> close	<OrderDetailRequest>	1	1/1	-	-	-
<ShowDetail>	Detailed / normal response	<OrderHeaderInfo>	1	1/1	String	1/1	0,1,2
</OrderDetailRequest>	<OrderDetailRequest> close	-	0	1/1	-	-	-

Notes:

If an order detail request is sent with the IM branch order number, the customer PO and not the order suffix, the transaction will retrieve information on all shipments that resulted from the order. In the example above it would return information on Ingram Micro branch order numbers 2048043-11, 2048043-12 and so on, if these subsequent shipments occurred. By specifying an order suffix, only information for that shipment will be returned and if any further shipments were made, it will not return the information on them.

Outbound XML Document

Root element Name: "OrderDetailResponse"

Sample Document: OrderDetailResponse

```

<OrderDetail Response>
  <Version>2.0</Version>
  <TransactionHeader>
    <SenderID>123456789</SenderID>
    <ReceiverID>987654321</ReceiverID>
    <ErrorStatus ErrorNumber=""></ErrorStatus>
    <DocumentID>{9D25E715-F65E-432F-A773-9E22FEA8FBDF}</DocumentID>
    <TransactionID>12345</TransactionID>
    <TimeStamp>2003-07-07T11:50:24</TimeStamp>
  </TransactionHeader>
  <OrderInformation>
    <BranchOrderNumber>2048043</BranchOrderNumber>
    <CustomerPO>CustomerPO_1</CustomerPO>
    <EndUserPO/>
    <OrderWeight>6</OrderWeight>
    <OrderEntryDate>2003-03-07</OrderEntryDate>
    <OrderType>O</PromiseDate>
    <FulfillmentFlag/>
    <ShipComplete>Y</ShipComplete>
    <HoldReason>GM</HoldReason>
  </OrderInformation>
</OrderDetail Response>

```

```

    <TermsCode>300</TermsCode>
    <ResellerNBR>20123456000</ResellerNBR>
    <NumberOfCartons>1</PromiseDate>
    <CreditMemoReasonCode/>
    <ConfigFlag/>
    <SplitBillToSwitch/>
    <SplitFromOrderNumber/>
    <RMACode/>
    <CreditCardSW/>
    <GovEndUserType/>
    <EntryMethod>L</EntryMethod>
    <TermID>WEBX</TermID>
    <BackOrderStatus>C</BackOrderStatus>
    <ShippableSW>Y</ShippableSW>
    <ConfigTimeStamp/>
    <SelSrcSlsHdr>5200</SelSrcSlsHdr>
    <SelSrcAcctnoHdr/>
    <OECarrier>OT</OECarrier>
    <FrtOutCode/>
    <ProNbrSW/>
    <ProNbr/>
    <OrderTotals>
    <SalesTotal>22.10</SalesTotal>
    <FreightTotal>9.40</FreightTotal>
    <TaxTotal>2.21</TaxTotal>
        <SalePlusTax>24.31</TaxTotal>
        <GrandTotal>33.71</GrandTotal>
        <CODAmount>33.71</CODAmount>
        <DiscountAmount>0</DiscountAmount>
        <CurrencyCode>EUR</CurrencyCode>
        <CompanyCurrency>EUR</CompanyCurrency>
        <CurrencyRate>1</CurrencyRate>
    </OrderTotals>
    <OrderSuffix ShipTo="11" BillTo="1234">
    <ShipToInformation>
    <ShipToAttention>Mrs Jones</ShipToAttention>
    <ShipToAddress1>Red House.</ShipToAddress1>
    <ShipToAddress2>55 The Street</ShipToAddress2>
    <ShipToAddress3 />
    <ShipToCity>Toronto</ShipToCity>
    <ShipToProvince>ON</ShipToProvince>
    <ShipToPostalCode>SW1 1IM</ShipToPostalCode>
    </ShipToInformation>
    <BillToInformation>
    <BillToAddress1>8020 PARKSMEAD WAY</BillToAddress1>
    <BillToAddress2 />
    <BillToAddress3 />
    <BillToCity>MiltonKeynes</BillToCity>
    <BillToProvince>ON</BillToProvince>
    <BillToPostalCode>MK5 5DR</BillToPostalCode>
    <BillToCountryCode>FT</BillToCountryCode>
    </BillToInformation>
    <ShipFromBranch Number="20">FT</ShipFromBranch>
    <OrderStatus>Paid</OrderStatus>
    <Carrier Code="CT">CITY LINK</Carrier>

```

```

<InvoiceDate>07/07/2003</InvoiceDate>
  <PromiseDate>07/07/2003</PromiseDate>
<OrderShipDate>2003-03-07</OrderShipDate>
<OrderLineDetail>
  <ProductLine>
<SKU>123A321</SKU>
  <ManufacturerPartNumber>DWZ-1234</ManufacturerPartNumber>
<SKUDescription>50" Plasma Screen</SKUDescription>
<OrderQuantity>1</OrderQuantity>
<ShipQuantity>1</ShipQuantity>
<BackOrderQuantity>0</BackOrderQuantity>
<ComponentQty>0</ComponentQty>
<BackOrderETADate>07/03/2003</BackOrderETADate>
<NonWayPromiseDate>07/03/2003</NonWayPromiseDate>
<UnitPrice>22.10</UnitPrice>
<UnitOfMeasure>Ea</UnitOfMeasure>
<ResellerUnitPrice>0</ResellerUnitPrice>
<ExtendedLineSales>22.10</ExtendedLineSales>
<LineSalesTotal>22.10</LineSalesTotal>
<LineTerms>30</LineTerms>
<CustomerLineNumber>1</CustomerLineNumber>
<CustomerItemNumber>1</CustomerItemNumber>
<IngramLineNumber>014</IngramLineNumber>
<ReserveSequenceNbr>N/A</ReserveSequenceNbr>
<VendorPartNumber>6382-34RF</VendorPartNumber>
<VendorName>CISCO SYSTEMS</VendorName>
  <SelSrcSl>N/A</SelSrcSl>
  <SelSrcAcctno>N/A</SelSrcAcctno>
  <FreeItemSwitch>N</FreeItemSwitch>
  <SystemComponentSwitch>N</SystemComponentSwitch>
    <ConfigInformation>
      <ConfigIndicator>NA</ConfigIndicator>
      <ConfigStatus>NA</ConfigStatus>
      <ConfigAssemblyCode>NA</ConfigAssemblyCode>
      <ConfigLabCode>NA</ConfigLabCode>
      <ConfigOnHoldSw>NA</ConfigOnHoldSw>
      <ConfigPcrCnt>NA</ConfigPcrCnt>
      <ConfigPchCnt>NA</ConfigPchCnt>
      <ConfigStgCnt>NA</ConfigStgCnt>
      <ConfigSthCnt>NA</ConfigSthCnt>
      <ConfigWipCnt>NA</ConfigWipCnt>
      <ConfigQaaCnt>NA</ConfigQaaCnt>
      <ConfigQahCnt>NA</ConfigQahCnt>
      <ConfigBinCnt>NA</ConfigBinCnt>
      <ConfigOshCnt>NA</ConfigOshCnt>
      <ConfigHoldReasonText>NA</ConfigHoldReasonText>
    </ConfigInformation>
    <SkuSerialNumber>
<SerialNumber />
  </SkuSerialNumber>
  </ProductLine>
  <CommentLine>
    <Comment>Electronic Order Rebate</Comment>
  </CommentLine>
</OrderLineDetail>

```

</OrderSuffix>
 </OrderInformation>
 </OrderDetailResponse>

Elements/Attributes Description: OrderDetailResponse

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<OrderDetailResponse>	Contains Order Detail Response	-	0	1/1	-	-	-
<Version>	XML Version	<OrderDetailResponse>	1	1/1	String	3/3	2.0
<TransactionHeader>	Contains transaction header information	<OrderDetailResponse>	1	1/1	-	-	-
<SenderID>	Sender identification	<TransactionHeader>	2	1/1	Char	0/18	987654321
<ReceiverID>	Receiver identification	<TransactionHeader>	2	1/1	Char	0/18	123456789
<ErrorStatus>	Refers to the error description generated by the transaction. Blank if transaction was successful	<TransactionHeader>	2	1/1	String	0/100	ERROR: Login ID is invalid
<ErrorNumber>	Refers to error number generated by the transaction. Blank if transaction was successful	Attribute of <ErrorStatus>	A	1/1	String	0/10	20044
<DocumentID>	Unique ID generated by Ingram Micro	<TransactionHeader>	2	1/1	String	1/40	{9D25E715-F65E-432F-A773-9E22FEA8FBDF}
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	2	0/1	Char	1/18	12345
<TimeStamp>	Date and time of transaction (CET)	<TransactionHeader>	2	1/1	Char	1/19	2003-07-07T00:00:00
</TransactionHeader>	Close of transaction header	<OrderDetailResponse>	1	1/1	-	-	-
<OrderInformation>	Contains order related information.	<OrderDetailResponse>	1	1/1	-	-	-
<BranchOrderNumber>	Ingram Sales Order Number (prefixed by the two digit warehouse branch number)	<OrderInformation>	2	1/1	String	7/7	2048043
<CustomerPO>	Customer PO number	<OrderInformation>	2	1/1	String	1/18	Customer PO_1
<EndUserPO>	Contains EU PO Number	<OrderInformation>	2	1/1	String	0/*	P12345
<OrderWeight>	Total weight of shipment in kilograms	<OrderInformation>	2	1/1	String	0/*	6
<OrderEntryDate>	Date the order was entered into IMpulse	<OrderInformation>	2	0/1	Char	0/10	2003-03-07
<OrderType>	Type of Order	<OrderInformation>	2	1/1	String	0/1	1

<FulfilmentFlag>	Determines whether Fulfillment order	<OrderInformation>	2	1/1	String	0/1	Y
<ShipComplete>	Ship Complete Flag	<OrderInformation>	2	1/1	String	0/1	Y
<HoldReason>	Reason for Order Hold	<OrderInformation>	2	1/1	String	0/2	GM
<TermsCode>	Code for Payment Terms	<OrderInformation>	2	1/1	Num	0/3	300
<ResellerNBR>	Rseller Account Number	<OrderInformation>	2	1/1	Num	0/5	+01234
<NumberOfCartons>	Contains Number of Cartons Shipped	<OrderInformation>	2	1/1	Num	0/3	1
<CreditMemoReasonCode>	Reason for credit memo	<OrderInformation>	2	1/1	String	0/2	RT
<ConfigFlag>	Configuration Flag	<OrderInformation>	2	1/1	String	0/2	C
<SplitBillToSwitch>	Split billing flag	<OrderInformation>	2	1/1	String	0/2	Y
<SplitFromOrderNumber>	Contains Original Order Number	<OrderInformation>	2	1/1	Num	0/2	Y
<RMACode>	Contains Returns Material Authorisation Code	<OrderInformation>	2	1/1	String	0/2	DF
<CreditCardSW>	Credit card indicator	<OrderInformation>	2	1/1	String	0/2	Y
<GovEndUserType>	Contains End User Type Information	<OrderInformation>	2	1/1	String	0/2	1
<EntryMethod>	Contains Entry Method Code	<OrderInformation>	2	1/1	Char	1/1	I
<TermID>		<OrderInformation>	2	1/1	String	4/4	WEBX
<BackOrderStatus>	Contains Back Order Status	<OrderInformation>	2	1/1	String	1/1	C
<ShippableSW>	Indicates if product is shippable	<OrderInformation>	2	1/1	String	1/1	Y
<ConfigTimesTamp>	Date and Time of Configuration	<OrderInformation>	2	1/1	String	0/19	2003-07-07T00:00:00
<SelSrcAcctnoHdr>	Select Source Account Number Header	<OrderInformation>	2	1/1	String	0/10	5200
<OECarrier>	Contains Carrier Code	<OrderInformation>	2	1/1	String	0/2	OT
<FrtOutCode>	Freight Code	<OrderInformation>	2	1/1	String	0/2	OT
<ProNbrSW>	Reserved for future use	<OrderInformation>	2	1/1	String	0/2	NA
<ProNbr>	Reserved for future use	<OrderInformation>	2	1/1	String	0/10	NA
<OrderTotals>	Contains total monetary amounts applicable to the order	<OrderInformation>	2	1/1	-	-	-
<SalesTotal>	Total sales amount (excluding charges such as freight and tax)	<OrderTotals>	3	1/1	Num	0/*	22.10
<FreightTotal>	Applicable freight charge. This field may be 0	<OrderTotals>	3	1/1	Num	0/*	9.40
<TaxTotal>	Total taxes on the order	<OrderTotals>	3	1/1	Num	0/*	2.21
<SalesPlusTax>	Contains Sales + Tax Value	<OrderTotals>	3	1/1	Num	0/*	24.31
<GrandTotal>	Grand total	<OrderTotals>	3	1/1	Num	0/*	33.71
<CODAmount>	Contains Cash On Delivery Amount – Sales + Tax + Freight	<OrderTotals>	3	1/1	Num	0/*	33.71
<DiscountAmount>	Contains Discount Amount	<OrderTotals>	3	1/1	Num	0/*	0
<CurrencyCode>	Contains Currency on	<OrderTotals>	3	1/1	Char	0/3	CAD

	Sales Order						
<CompanyCurrency>	Contains Company Trading Currency	<OrderTotals>	3	1/1	Char	0/3	CAD
<CurrencyRate>	Contains Exchange Rate	<OrderTotals>	3	1/1	Num	0/*	1
</OrderTotals>	<OrderTotals> close	<OrderInformation>	2	1/1	-	-	-
<OrderSuffix>	Order suffix	<OrderInformation>	2	0/*	-	-	-
ID	Order suffix ID	<OrderSuffix> attribute	A	1/1	String	2/2	11
<ShipToInformation>	Contains the order shipping information	<OrderSuffix>	3	1/1	-	-	-
<ShipToAttention>	Attention line of shipping address	<ShipToInformation>	4	0/1	String	0/35	Mrs Jones
<ShipToAddress1>	First line of shipping address	<ShipToInformation>	4	1/1	String	1/35	Red House
<ShipToAddress2>	Second line of shipping address	<ShipToInformation>	4	0/1	String	0/35	55 The Street
<ShipToAddress3 />	Third line of shipping address	<ShipToInformation>	4	0/1	String	0/35	-
<ShipToCity>	City of shipping address	<ShipToInformation>	4	1/1	String	1/21	London
<ShipToProvince>	ISO country code of shipping address	<ShipToInformation>	4	1/1	String	2/2	UK
<ShipToPostalCode>	Postal/zip code of shipping address	<ShipToInformation>	4	1/1	String	0/9	SW1 1IM
<ShipToCountryCode>	Country of shipping address	<ShipToInformation>	4	0/1	String	0/2	US
<ShipToSuffix>	Account ShipToSuffix	<ShipToInformation>	4	0/1	String	0/3	201
</ShipToInformation>	<ShipToInformation> close	<OrderSuffix>	3	1/1	-	-	-
<BillToInformation>	Contains the order Billing information	<OrderSuffix>	3	0/1	-	-	-
<BillToAddress1>	First line of billing address	<BillToInformation>	4	1/1	String	1/35	8020 Parksmead Way
<BillToAddress2 >	Second line of billing address	<BillToInformation>	4	0/1	String	0/35	-
<BillToAddress3 >	Third line of billing address	<BillToInformation>	4	0/1	String	0/35	-
<BillToCity>	City to billing address	<BillToInformation>	4	1/1	String	1/21	Milton Keynes
<BillToProvince>	ISO country code of billing address	<BillToInformation>	4	1/1	String	2/2	Bucks
<BillToPostalCode >	Postal/zip code of billing address	<BillToInformation>	4	1/1	String	0/9	SE3 4DJ
<BillToCountryCode>	Contains Bill To Country Code	<BillToInformation>	4	1/1	String	2/2	FT
<BillToSuffix>	Billing Account Suffix	<BillToInformation>	4	0/1	String	0/3	117
</BillToInformation>	<BillToInformation> close	<OrderSuffix>	3	1/1	-	-	-
<ShipFromBranch >	Branch ship from information	<OrderSuffix>	3	1/1	String	0/*	FT
Number	Branch ship from number	<ShipFromBranch> attribute	A	1/1	String	2/2	20
<OrderStatus>	Order status description	<OrderSuffix>	3	1/1	String	0/*	Paid
<Carrier>	Contains the carrier information	<OrderSuffix>	3	0/1	String	0/*	Citylink Nextday
Code	Carrier code	<Carrier> attribute	A	1/1	String	2/4	CT
<InvoiceDate>	Contains Invoice Date	<OrderSuffix>	3	1/1	String	0/10	07/07/200

							3
<PromiseDate>	Contains Promise Date	<OrderSuffix>	3	1/1	String	0/10	07/07/2003
<OrderShipDate>	Order shipping date. Only used if order has been shipped	<OrderSuffix>	3	0/1	Date	0/*	2003-03-07
<OrderLineDetail>	Contains the order detail information	<OrderSuffix>	3	1/1	-	-	-
<ProductLine>	Contains the order product line detail	<OrderLineDetail>	4	1/*	-	-	-
<SKU>	Ingram Micro part number	<ProductLine>	5	1/1	String	1/12	123321
<ManufacturerPart Number>	Manufacturer Part Number	<ProductLine>	5	0/1	String	1/14	65ASDN HB23002 56
<SKUDescription>	Detail of Ingram Micro part number	<ProductLine>	5	1/1	String	0/*	Universal Printer Cartridge
<OrderQuantity>	Quantity of stock that has been ordered	<ProductLine>	5	1/1	Int	0/*	1
<ShipQuantity>	Quantity of stock that has been shipped	<ProductLine>	5	1/1	Int	0/*	1
<BackOrderQuantity>	Quantity of stock that is on back order	<ProductLine>	5	1/1	Int	0/*	0
<ComponentQty>	Quantity of Components that has been ordered	<ProductLine>	5	1/1	Int	0/*	0
<BackOrderETADate>	Contains Back Order ETA Date	<ProductLine>	5	1/1	Char	0/10	07/03/2003
<NordicPromiseDate>	Applies to Nordics only	<ProductLine>	5	1/1	Char	0/10	07/03/2003
<UnitPrice>	Price of each of SKU	<ProductLine>	5	1/1	String	0/*	22.10
<UnitOfMeasure>	The Unit of Measure	<ProductLine>	5	1/1	String	0/2	Ea
<ResellerUnitPrice>	Contains Reseller Unit Price	<ProductLine>	5	1/1	String	0/*	19.99
<ExtendedLineSales>	Extended Line Sales Value	<ProductLine>	5	1/1	String	0/*	22.10
<LineSalesTotal>	Total sales of each line of order	<ProductLine>	5	1/1	String	0/*	22.10
<LineTerms>	Line level payment terms	<ProductLine>	5	1/1	String	0/2	30
<CustomerLineNumber>	Customer internal line number	<ProductLine>	5	1/1	String	3/3	1
<CustomerItemNumber>	Customer Item Number	<ProductLine>	5	1/1	Num	3/3	1
<IngramLineNumber>	Line number of Ingram Micro sales order	<ProductLine>	5	1/1	String	3/3	014
<ReserveSequenceNbr>	Reserve Sequence Number	<ProductLine>	5	1/1	Num	0/3	01
<VendorNumber> (replaces VendorPartNumber from V1)	IM vendor number	<ProductLine>	5	1/1	String	0/4	6382
<VendorName>	The Name of the Vendor	<ProductLine>	5	1/1	String	0/*	Cisco Systems
<SelSrcSls>	Select Source Sales Number	<ProductLine>	5	1/1	String	0/3	N/A
<SelSrcAcctno>	Select Source Account	<ProductLine>	5	1/1	String	0/10	N/A

	Number						
<FreeItemSwitch>	Product Free Switch	<ProductLine>	5	1/1	String	0/1	N
SystemComponent Switch>	Component identifier	<ProductLine>	5	1/1	String	0/1	N
<ConfigInformation>	Contains Configuration Information	<ProductLine>	5	-	-	-	-
<ConfigIndicator>	Configuration Indicator	<ConfigInformation>	6	1/1	String	0/*	NA
<ConfigStatus>	Configuration Status	<ConfigInformation>	6	1/1	String	0/*	NA
<ConfigAssemblyCode>	Configuration Assembly Code	<ConfigInformation>	6	1/1	String	0/*	NA
<ConfigLabCode>	Configuration Labour Code	<ConfigInformation>	6	1/1	String	0/*	NA
<ConfigONHoldSW>	Configuration On Hold Switch	<ConfigInformation>	6	1/1	String	0/*	NA
<ConfigPcrCnt>	Configuration control	<ConfigInformation>	6	1/1	String	0/*	00009
<ConfigPchCnt>	Configuration control	<ConfigInformation>	6	1/1	String	0/*	00008
<ConfigSTGCNT>	Configuration control	<ConfigInformation>	6	1/1	String	0/*	00007
<ConfigSTHCNT>	Configuration control	<ConfigInformation>	6	1/1	String	0/*	00006
<ConfigWIPCNT>	Configuration control	<ConfigInformation>	6	1/1	String	0/*	00005
<ConfigQAACNT>	Configuration control	<ConfigInformation>	6	1/1	String	0/*	00004
<ConfigQAHCNT>	Configuration control	<ConfigInformation>	6	1/1	String	0/*	00003
<ConfigBINCNT>	Configuration control	<ConfigInformation>	6	1/1	String	0/*	00002
<ConfigOSHCNT>	Configuration control	<ConfigInformation>	6	1/1	String	0/*	00001
<ConfigHoldReasonText>	Configuration ON HOLD Reason Code	<ConfigInformation>	6	1/1	String	0/100	Bad configuration
<ConfigInformation>	Configuration Information Close	<OrderLineDetail>	5	-	-	-	-
<SkuSerialNumber>	Contains the serial number information	<ProductLine>	5	0/*	-	-	-
<SerialNumber>	Serial number of each SKU in the order	<SkuSerialNumber>	6	0/1	String	0/*	34347462782
</SkuSerialNumber>	<SkuSerialNumber> close	<ProductLine>	5	0/*	-	-	-
</ProductLine>	<ProductLine> close	<OrderLineDetail>	4	1/*	-	-	-
<CommentLine>	Start of comment section	<OrderLineDetail>	4	1/*	-	-	-
<Comment>	Comment on order	<CommentLine>	5	1/1	String	1/35	Electronic order rebate
</CommentLine>	Close of comment section	<OrderLineDetail>	4	1/1	-	-	-
</OrderLineDetail>	<OrderLineDetail> close	<OrderSuffix>	3	1/1	-	-	-
</OrderSuffix>	<OrderSuffix>	<OrderInformation>	2	1/*	-	-	-
</OrderInformation>	<OrderInformation> close	<OrderDetailResponse>	1	1/1	-	-	-
<CustomOrderPersist>	If CustomOrderPersist was submitted in the IMXML Order Request (V2.0 or V2.5), the data will be passed here upon request. It will not show up elsewhere.	<OrderHeaderInformation>	2	0/*	-	-	-
<NameValue>	Contain name/ value pairs for persisited data	<CustomOrderPersist>	3	1/*	-	-	-

<Name>	Describes the value persisted	<NameValue>	4	1/1	String	1/50	WebOrder ID
<Value>	The value that can be persisted	<NameValue>	4	1/1	String	1/100	1234567
</NameValue>	Close of NameValue	<CustomOrderPersist>	3	1/*	-	-	-
</CustomOrderPersist>	Close of CustomOrderPersist Info	<OrderHeaderInformation>	2	0/*	-	-	-
</OrderDetailResponse>	<OrderDetailResponse> close	-	0	-	-	-	-

An error response:

The example below is an error message that will be generated if the customer's Login, Password or Country Code is invalid:

```
<TransactionHeader>
  <ErrorStatus ErrorNumber="20007">ERROR: LoginID, or Password or CountryCode is incorrect</ErrorStatus>
  <DocumentID>{95D7E024-E7BA-40F2-838D-405E4778E5E0}</DocumentID>
  <TransactionID>OrderDetail</TransactionID>
  <TimeStamp>2001-07-12T15:16:06</TimeStamp>
</TransactionHeader>
</OrderDetailResponse>
```

The example below is an error message that will be generated if the customer is not authorised to run the order detail transaction:

```
<OrderDetailResponse>
<TransactionHeader>
  <ErrorStatus ErrorNumber="20002">ERROR: Customer is not allowed to execute current transaction</ErrorStatus>
  <DocumentID>{A80C66D0-DFBC-430E-93C1-DC0A69A0D750}</DocumentID>
  <TransactionID>OrderDetail</TransactionID>
  <TimeStamp>2001-07-12T15:17:37</TimeStamp>
</TransactionHeader>
</OrderDetailResponse>
```

The example below is an example of an error message that will be generated if the BranchOrderNumber and CustomerPo invalid.

```
<OrderDetailResponse>
<TransactionHeader>
  <ErrorStatus ErrorNumber="20086">ERROR:Order Not Found</ErrorStatus>
  <DocumentID>{77E21086-DEB1-4ACE-8667-FB1BCCCB4441}</DocumentID>
  <TransactionID>OrderStatus</TransactionID>
  <TimeStamp>2001-07-12T13:42:44</TimeStamp>
</TransactionHeader>
</OrderDetailResponse>
```

Order Status Transaction

Description of Transaction

The order status request allows the customer to query for real-time order status information. The information provided by this transaction is limited to summary information. More detailed status information is available in the Order Detail request transaction.

The transaction requires the customer PO in order to return information. It does not require the use of the Ingram Micro order number. Information will be returned for all shipments that have been made for the customer purchase order number.

The possible order status codes are:

Order Status Messages Returned in the Order Status Response

OPEN	Open order
CUSTOMER HOLD	Partner placed order on Ecom customer hold when they submitted their order via XML.
SALES HOLD	A hold used when action is required by sales (Ex: Change pricing). IM will resolve.
CREDIT HOLD	Some orders will go on credit hold. IM will resolve.
ORDER PRINTED	Time Stamped. Sent to Ship desk in the DC. It is printed at the DC for picking.
RELEASED	Ship desk has reviewed. A pick ticket has been issued and it is in the process of being picked.
PICKED	Rarely Seen
INSPECTED	Rarely Seen
PACKED	Rarely Seen
SHIPPED	***Prepared for Shipping, but NOT yet shipped
INVOICED	Shipment has been tendered to the carrier. Serial Numbers were scanned.
BILLED	Billed (For RMA, product received by Ingram)
PAID	Paid (For RMA, customer has used RMA credit)
Billing Error Order Status Messages	
The order may be given a billing error status by our system. This could happen if there is an issue with a sku (EX: if the sku has a cost or price of \$0). After the "INVOICED" stage and before the "BILLED" stage, if there is a billing error, you will see a status of "BILLING ERROR". Ingram will need to review and force bill. Once force billed, the status is "FORCE BILLED".	
BILLING ERROR	Still Shipped
SHIPPED WITH BILLING ERROR	Still Shipped

FORCE BILLED	Still Shipped
Contact IM- Possible problem	
The following indicate a possible problem. Contact your sales Rep to inquire on these statuses.	
WAREHOUSE ERROR	Order Not printed; not set to print.
HOLD	Hold
Bill For History	
TRANSFERRED	A warning message would trigger this message. Contact IM.
Other Status Messages	
UNHANDLED STATUS:	A catch all
Order In Progress	You might get this if Ingram rep is making changes to the order at time of status call. Not yet finalized.

Note: Querying Order Status for a PO that has been voided, will return an error message stating an Invalid PO. However, the Order Detail transaction would enable partners to find such an order. It would return a status of "Voided".

Inbound XML Document

Root element Name: "OrderStatusRequest"

Sample Document: OrderStatusRequest

```
<OrderStatusRequest>
<Version>2.0</Version>
<TransactionHeader>
<SenderID>123456789</SenderID>
<ReceiverID>987654321</ReceiverID>
<CountryCode>FT</CountryCode>
<LoginID>UK3833HHD</LoginID>
<Password>Re887Jky52</Password>
<TransactionID>54321</TransactionID>
<TransactionHeader>
</OrderHeaderInfo>
<CustomerPO>CustomerPO_1</CustomerPO>
</OrderHeaderInfo>
</OrderStatusRequest>
```

Elements/Attributes Description: OrderStatusRequest

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<OrderStatusRequest>	Contains Order Status request	-	0	1/1	-	-	-
<Version>	XML Version	<OrderStatusRequest>	1	1/1	String	3/3	2.0
<TransactionHeader>	See Transaction Header	<OrderStatusRequest>	1	1/1	-	-	-
<SenderID>	Contains Ingram Micro Sender Identification	<TransactionHeader>	2	1/1	String	0/18	123456789
<ReceiverID>	Contains Customer / Vendor Identification	<TransactionHeader>	2	1/1	String	0/18	987654321

<CountryCode>	2 character ISO country code	<TransactionHeader>	2	1/1	Char	2/2	FT
<LoginID>	Customer specific login	<TransactionHeader> <TransactionHeader>	2	1/1	Char	6/10	UK3833H HD
<Password>	Customer specific password		2	1/1	String	6/10	Re887Jky 52
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	1	0/1	String	1/18	54321
</TransactionHeader>	Transaction Header Close	<ProductAlertRequest>	1	1/1	-	-	-
<OrderHeaderInfo>	Contains order information to be queried	<OrderStatusRequest>	1	1/1	-	-	-
<CustomerPO>	Customer PO number	<OrderHeaderInfo>	2	1/1	String	1/18	Customer PO_1
</OrderHeaderInfo>	<OrderHeaderInfo> close	<OrderStatusRequest>	1	1/1	-	-	-
</OrderStatusRequest>	<OrderStatusRequest> close	-	0	1/1	-	-	-

Outbound XML Document

Root element Name : "OrderStatusResponse"

Sample Document: OrderStatusResponse

```

<OrderStatusResponse>
<Version>2.0</Version>
<TransactionHeader>
<SenderID>123456789</SenderID>
<ReceiverID>987654321</ReceiverID>
<CountryCode>FT</CountryCode>
<LoginID> UK3833HHD </LoginID>
<Password> Re887Jky52</Password>
<TransactionID>54321</TransactionID>
<TransactionHeader>
  <OrderStatusInformation>
<CustomerPO Number="CustomerPO_1">
<OrderInfo>
  <BranchOrderNumber>2048043</BranchOrderNumber>
  <OrderEntryDate>2002-11-11</OrderEntryDate>
  <OrderSuffix ID="11">
  <ShipFromBranch Number="40">Toronto</ShipFromBranch>
  <OrderStatus>OPEN</OrderStatus>
<TotalSales>199.99</TotalSales>
  <InvoiceDate>2002-11-25</InvoiceDate>
  <ShippedDate>2002-11-25</ShippedDate>
  <OrderCreditMemo Code="Code_1">OrderCreditMemo_1</OrderCreditMemo>
  <OrderCreditMemo Code="Code_2">OrderCreditMemo_2</OrderCreditMemo>
</OrderSuffix>
  <OrderSuffix ID="12">
    <ShipFromBranch Number="40">Toronto</ShipFromBranch>
    <OrderStatus>PAID</OrderStatus>
    <TotalSales>66.68</TotalSales>
  <InvoiceDate>2002-11-26</InvoiceDate>
  <ShippedDate>2002-11-26</ShippedDate>

```



```

<OrderCreditMemo Code="Code_3">OrderCreditMemo_3</OrderCreditMemo>
<OrderCreditMemo Code="Code_4">OrderCreditMemo_4</OrderCreditMemo>
</OrderSuffix>
</OrderInfo>
</CustomerPO>
</OrderStatusInformation>
</OrderStatusResponse>

```

Elements/Attributes Description: OrderStatusResponse

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<OrderStatusResponse>	Contains Order Status Response	-	0	1/1	-	-	-
<Version>	XML Version	<OrderStatusResponse>	1	1/1	String	3/3	2.0
<TransactionHeader>	See Transaction Header	<OrderStatusResponse>	1	1/1	-	-	-
<SenderID>	Contains Ingram Micro Sender Identification	<TransactionHeader>	2	11	String	0/18	123456789
<ReceiverID>	Contains Customer / Vendor Identification	<TransactionHeader>	2	1/1	String	0/18	987654321
<ErrorStatus>	Refers to the error description generated by the transaction. Blank if transaction completed successfully.	<TransactionHeader>	2	1/1	String	0/100	Error:LoginID or Password or CountryCode is invalid
<DocumentID>	Unique ID generated by Ingram Micro	<TransactionHeader>	2	1/1	String	1/40	{9D25E715-F65E-432F-A773-9E22FEA8FBDF}
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	2	0/1	String	1/18	54321
<TimeStamp>	Date and Time of Transaction (CET)	<TransactionHeader>	2	1/1	String	1/19	2001-07-12T10:30:41
</TransactionHeader>	Transaction Header Close	<ProductAlertRequest>	1	1/1	-	-	-
<OrderStatusInformation>	Contains Order Status information	<OrderStatusResponse>	1	0/1	-	-	-
<CustomerPO>	Contains customer PO number information	<OrderStatusInformation>	2	1/1	-	-	-
Number	Customer PO number	<CustomerPO> attribute	A	1/1	String	1/18	Cnumber1
<OrderInfo>	Contains order information	<CustomerPO>	3	1/*	-	-	-
<BranchOrderNumber>	Ingrammicro branch and order number	<OrderInfo>	4	1/1	String	7/7	2012345
<OrderEntryDate>	Entry date of the order	<OrderInfo>	4	0/1	Date	0/10	2003-03-12
<OrderSuffix>	Contains Ingrammicro order suffix information	<OrderInfo>	4	1/*	-	-	-

ID	Order suffix	<OrderSuffix> attribute	A	1/1	String	2/2	11
<ShipFromBranch>	Warehouse from which the product will be shipped	<OrderSuffix>	5	1/1	String	0/*	UK
Number	Warehouse number	<ShipFromBranch> attribute	A	1/1	String	2/2	20
<OrderStatus>	Status of the order	<OrderSuffix>	5	1/1	String	0/*	Billed
<TotalSales>	Total value of the order	<OrderSuffix>	5	0/1	String	1/18	123.58
<InvoiceDate>	If Invoiced, the date this happened.	<OrderSuffix>	5	0/1	Date	0/10	2003-03-12
<ShippedDate>	If Shipped, the date this happened.	<OrderSuffix>	5	0/1	Date	0/10	2003-03-12
<OrderCreditMemo>	If this is a return, this is the reason given.	<OrderSuffix>	5	1/*	String	0/*	Faulty goods
Code	The RMA reason code.	<OrderCreditMemo> attribute	A	0/1	String	0/2	FG
</OrderSuffix>	<OrderSuffix> close	<OrderInfo>	4	1/1	-	-	-
</OrderInfo>	<OrderInfo> close	<CustomerPO>	3	1/1	-	-	-
</CustomerPO>	<CustomerPO> close	<OrderStatusInformation>	2	1/1	-	-	-
</OrderStatusInformation>	<OrderStatusInformation> close	<OrderStatusResponse>	1	1/1	-	-	-
</OrderStatusResponse>	<OrderStatusResponse> Close	-	0	1/1	-	-	-

An error response:

An example of an error message that will be returned if an invalid Login, Password or Country Code is sent:

```
<OrderStatusResponse>
<TransactionHeader>
  <ErrorStatus ErrorNumber="20007">ERROR: LoginID, or Password or CountryCode is incorrect</ErrorStatus>
  <DocumentID>{5459A21C-0C63-4D22-A98C-520F035D8FAC}</DocumentID>
  <TransactionID>OrderStatus</TransactionID>
  <TimeStamp>2001-07-12T11:54:27</TimeStamp>
</TransactionHeader>
</OrderStatusResponse>
```

An example of an error message that will be generated if the customer is not authorised to run the current transaction:

```
<OrderStatusResponse>
<TransactionHeader>
  <ErrorStatus ErrorNumber="20002">ERROR: Customer is not allowed to execute current transaction</ErrorStatus>
  <DocumentID>{A886C473-AB7A-4E74-AC16-0BD76337D2F5}</DocumentID>
  <TransactionID>OrderStatus</TransactionID>
  <TimeStamp>2001-07-12T12:01:10</TimeStamp>
</TransactionHeader>
</OrderStatusResponse>
```

```
<OrderStatusResponse>  
<TransactionHeader>  
  <ErrorStatus ErrorNumber="20086">ERROR:Order Not Found</ErrorStatus>  
  <DocumentID>{77E21086-DEB1-4ACE-8667-FB1BCCCB4441}</DocumentID>  
  <TransactionID>OrderStatus</TransactionID>  
  <TimeStamp>2001-07-12T13:42:44</TimeStamp>  
</TransactionHeader>  
</OrderStatusResponse>
```

An example of an error message that will be returned if an invalid CustomerPO is sent.

Order Tracking Transaction

Description of Transaction

Order Tracking is a real-time transaction that allows the customer to query for tracking numbers of shipped orders.

Order Numbers are recycled within the IM system over time, so customers should choose a narrow search criterion to reduce the possibility of retrieving irrelevant data. (To decrease the chances of recycled orders numbers alpha numeric order numbers can be issued).

In consideration of this, the following are the recommended search methods: (To decrease the chances of recycled orders numbers alpha numeric order numbers can be issued).

A combination of Ingram Micro order number, order suffix, and customer purchase order number. This will return information for a single shipment

A combination of Ingram order number and customer purchase order number. This will return information for all shipments for an order. The customer purchase order number sent on its own can achieve the same results.

Any order tracking transaction sent without an order suffix will return only orders shipped within the last 2 months.

Orders are often shipped in multiple packages. This transaction can be used to determine what products were shipped in a specific package/carton. The part numbers are not available until the day after shipment as they are updated in the nightly batch process.

Version 2.0

The amount of detail that the Order Tracking response provides has not been enhanced for version 2.0. The changes are limited to the transaction header.

Inbound XML Document

Root element Name: "OrderTrackingRequest"

Sample Document: OrderTrackingRequest

```
<OrderTrackingRequest>
<Version>2.0</Version>
<TransactionHeader>
  <SenderID>123456789</SenderID>
  <ReceiverID>987654321</ReceiverID>
  <CountryCode>FT</CountryCode>
  <LoginID>UK3833HHD</LoginID>
  <Password>Re887Jky52</Password>
```

```

<TransactionID>54321</TransactionID>
</TransactionHeader>
<TrackingRequestHeader>
  <BranchOrderNumber>2048043</ BranchOrderNumber >
  < OrderSuffix >11</ OrderSuffix >
  < CustomerPO>CustomerPO_1</ CustomerPO >
</TrackingrequestHeader>
<ShowDetail>2</ShowDetail>
</OrderTrackingRequest>

```

Elements/Attributes Description: OrderTrackingRequest

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<OrderTrackingRequest>	Contains OrderTrackingRequest	-	0	1/1	-	-	-
<Version>	XML Version	<OrderTrackingRequest>	1	1/1	String	3/3	2.0
<TransactionHeader>	Contains customer specific login information	<OrderTrackingRequest>	1	1/1	-	-	-
<SenderID>	Contains Ingram Micro Sender Identification	<TransactionHeader>	2	1/1	String	0/18	123456789
<ReceiverID>	Contains Customer / Vendor Identification	<TransactionHeader>	2	1/1	String	0/18	987654321
<CountryCode>	2 character ISO country code	<TransactionHeader>	2	1/1	Char	2/2	FT
<LoginID>	Customer specific login	<TransactionHeader>	2	1/1	Char	6/10	UK3833HHD
<Password>	Customer specific password	<TransactionHeader>	2	1/1	String	6/10	Re887Jky52
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	1	0/1	String	1/18	54321
<TransactionHeader>	See Transaction Header	<OrderTrackingRequest>	1	1/1	-	-	-
<TrackingRequestHeader>	Contains details of order to be queried	<OrderTrackingRequest>	1	1/1	-	-	-
<BranchOrderNumber>	Ingrammicro branch and order number	<TrackingRequestHeader>	2	0/1	String	7/7	2012345
<OrderSuffix>	Ingrammicro order number suffix	<TrackingRequestHeader>	2	0/1	String	2/2	11
<CustomerPO>	Customer PO number	<TrackingRequestHeader>	2	1/1	String	1/18	Corder1
</TrackingRequestHeader>	<TrackingRequestHeader> close	<OrderTrackingRequest>	1	1/1	-	-	-
<ShowDetail>	Dictates the detail provided in the response (values are 0, 1, 2)	<OrderTrackingRequest>	1	1/1	Char	1/1	2
</OrderTrackingRequest>	<OrderTrackingRequest> close	-	0	1/1	-	-	-

Outbound XML Document

Root element Name : "OrderTrackingResponse"

Sample Document: OrderTrackingResponse

```
<OrderTrackingResponse>
```

```

<Version>2.0</Version>
<TransactionHeader>
  <SenderID>123456789</SenderID>
  <ReceiverID>987654321</ReceiverID>
  <ErrorStatus ErrorNumber="ErrorNumber_1">ErrorStatus_1</ErrorStatus>
  <DocumentID>{C160DB2B-08A0-475F-BF17-ABF41576652A}</DocumentID>
  <TransactionID>CI123456</TransactionID>
  <TimeStamp>2001-07-19T13:36:41</TimeStamp>
</TransactionHeader>
<CustomerPO>8</CustomerPO>
<Order>
  <BranchOrderNumber>2048043</BranchOrderNumber>
  <TotalWeight>8</TotalWeight>
  <CartonCount>1</CartonCount>
  <Suffix SuffixNumber="11">
    <Carrier Code="CT">CITY LINK</Carrier>
    <Package ID="0000474410">
      <ShipDate>2001-05-25</ShipDate>
      <BoxNumber>001</BoxNumber>
      <BoxWeight>8</BoxWeight>
      <TrackingURL>http:\\www.JustA
TestingURL.com?TrackingID=0000474410</TrackingURL>
    <Contents>
      <ContentDetail>
        <SKU>123A321</SKU>
        <Quantity>2</Quantity>
        <IngramLineNumber>1</IngramLineNumber>
      </ContentDetail>
    </Contents>
  </Package>
</Suffix>
</Order>
</OrderTrackingResponse>

```

Elements/Attributes Description: OrderTrackingResponse

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<OrderTrackingResponse>	Contains Order Tracking Response	-	0	-	-	-	-
<Version>	Indicates the version of IM-XML	<OrderTrackingResponse>	1	1/1	String	3/3	2.0
<TransactionHeader>	Contains customer specific login information	<OrderTrackingResponse>	1	1/1	-	-	-
<SenderID>	Contains Ingram Micro Sender Identification	<TransactionHeader>	2	1/1	String	0/18	123456789
<ReceiverID>	Contains Customer / Vendor Identification	<TransactionHeader>	2	1/1	String	0/18	987654321
<ErrorStatus>	Refers to the error description generated by the transaction. Blank if transaction completed successfully	<TransactionHeader>	2	1/1	String	0/100	Error:LoginID or Password or CountryCode is invalid

ErrorNumber	Refers to the error number generated by the transaction.	Attribute of <Error Status>	A	1/1	String	0/50	123456
<DocumentID>	Unique ID generated by Ingram Micro	<TransactionHeader>	2	1/1	String	1/38	{9D25E715-F65E-432F-A773-9E22FEA8FBDF}
<TransactionID>	Unique ID generated by customer. This ID will remain constant on submit and response	<TransactionHeader>	2	0/1	String	1/18	54321
<TimeStamp>	Date and Time of Transaction (CET)	<TransactionHeader>	2	1/1	String	1/19	2001-07-12T10:30:41
</TransactionHeader>	Transaction Header Close	<OrderTrackingResponse>	1	1/1	-	-	-
<CustomerPO>	Customer order number	<OrderTrackingResponse>	2	0/1	String	1/18	Corder1
<Order>	Contains order information	<OrderTrackingResponse>	1	1/1	-	-	-
<BranchOrderNumber>	Ingrammicro branch and order number	<Order>	2	1/1	String	0/7	2012345
<TotalWeight>	Total weight for the order in KG	<Order>	2	1/1	String	1/*	113
<CartonCount>	Number of cartons in the order	<Order>	2	1/1	Int	1/*	3
<Suffix>	Contains Ingrammicro order information by suffix	<Order>	2	0/*	-	-	-
SuffixNumber	Ingrammicro order suffix number	<Suffix> attribute	A	1/1	String	2/2	11
<Carrier >	Contains carrier information for this shipment as defined by the suffix	<Suffix>	3	1/1	-	-	-
Code	Carrier code	<Carrier> attribute	A	1/1	String	2/2	CN
<Package>	Contains tracking number information	<Suffix>	3	0/*	-	-	-
ID	Tracking number	<Package> attribute	A	1/1	String	0/*	0003312
<ShipDate>	Date order suffix was shipped	<Package>	4	1/1	Date	0/*	2003-03-11
<BoxNumber>	Box number	<Package>	4	1/1	Int	1/3	45
<BoxWeight>	Box weight	<Package>	4	1/1	String	1/3	156
<TrackingURL>	URL to use with tracking number	<BoxWeight>	5	0/1	String	1/50	http://www.TestAddress?TrackingID=123
<Contents>	Contains information for the current suffix	<Package>	4	1/*	-	-	-
<ContentDetail>	Contains SKU, Qty, Line Num	<Contents>	5				
<SKU>	Ingram Micro product code	<ContentDetail>	6	0/*	String	1/12	132A321
<Quantity>	Qty Shipped on line	<ContentDetail>	6	1/*	String	1/*	10
<IngramLineNum>	Ingram Order Line	<ContentDetail>	6	1/*	String	1/*	5

er>	Number						
</ContentDetail>	<ContentDetail> close	<Contents>	5	1/1	-	-	-
</Contents>	<Contents> close	<Package>	4	1/1	-	-	-
</Package>	<Package> close	<Suffix>	3	1/1	-	-	-
</Suffix>	<Suffix> close	<Order>	2	1/1	-	-	-
</Order>	<Order> close	<OrderTrackingResponse>	1	1/1	-	-	-
</OrderTrackingResponse>	<OrderTrackingResponse> close	-	0	1/1	-	-	-

An error response:

An example of an error message that will be generated if an invalid Login, Password or Country Code is sent:

```
<TransactionHeader>
<
  <ErrorStatus ErrorNumber="20007">ERROR:
    LoginID, or Password or CountryCode is
    incorrect</ErrorStatus>
<
  <DocumentID>{0598CBDE-30B5-497E-9096-CAC5992D4AFD}
  </DocumentID>
<
  <TransactionID>789456</TransactionID>
<
  <TimeStamp>2001-07-16T17:25:58</TimeStamp>
</TransactionHeader>
```

An example of an error message that will be generated if the customer is not authorised to run the current transaction:

```
<TransactionHeader>
<
  <ErrorStatus ErrorNumber="20007">ERROR:
    Customer is not allowed to execute current transaction.</ErrorStatus>
<
  <DocumentID>{0598CBDE-30B5-497E-9096-CAC5992D4AFD}
  </DocumentID>
<
  <TransactionID>789456</TransactionID>
<
  <TimeStamp>2001-07-16T17:25:58</TimeStamp>
</TransactionHeader>
```


PNA (Price And Availability) Transaction

Description of Transaction

The PNA Request is a real-time transaction that returns information about current pricing of a product and the availability of the product in each of the Ingram Micro's warehouses. Further information that is provided is "on-order" amounts and ETA's for the amounts on order.

Up to 50 item criteria can be queried in a single request. This transaction must not be used to obtain pricing and availability updates for product catalogs.

Ingram can provide a Price catalog file and an Inventory file in flat file format, which can be obtained through FTP download. Please contact 1800-616-4665 or Electronic.Services@ingrammicro.com for more information on these files.

Government Pricing: (Available for USA only)

Government program type and end user type are mandatory fields to retrieve pricing for government programs.

For GovtProgramType, the following are valid values: 'PA'- Government 'ED' – Educational

For GovtEndUserType, the following are valid values:

For PA Program Type: 'F' – Federal 'S'- State 'E' –Local

For ED Program Type: 'K' - K-12 Education 'H'- Higher Education

An element in the response called "<GovEdSpecialPrice>" will identify if the price returned is a gov/ed price or not.

ReservedInventory:

This element is only relevant for partners that are enrolled in Ingram's Reserve Inventory program. If a ReserveInventory value of Y is sent in the request and the partner is enrolled in the program, the response will include visibility into stock that is in their reserve, in addition to stock that is open to all partners. Please contact your Ingram Micro Sales representative for information on the program and on enrollment.

All new enhancements / data elements with Version 2.0 can be accessed using <ShowDetail> = 2. The changes can be clearly seen by the blue coloring in the response table. All uncolored rows are available through version 1.0.

Sample Document: PNARquest

```

<PNARquest>
  <Version>2.0</Version>
  <TransactionHeader>
    <SenderID>MD</SenderID>
    <ReceiverID>YOU</ReceiverID>
    <CountryCode>MD</CountryCode>
    <LoginID>xxxxxx</LoginID>
    <Password>xxxxxx</Password>
    <TransactionID>12345</TransactionID>
  </TransactionHeader>
  <PNAInformation CustomerPartNumber="E0123456" Quantity="1"/>
  <PNAInformation ManufacturerPartNumber="RG0322" Quantity="1"/>
  <PNAInformation UPC="0760884154205" Quantity="1"/>
  <PNAInformation SKU="123512" Quantity="" />
  <ShowDetail>2</ShowDetail>
</PNARquest>

```

Elements/Attributes Description: PNARquest

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<PNARquest>	Contains price and availability request	-	0	1/1	-	-	-
<Version>	XML Version	<PNARquest>	1	1/1	String	3/3	2.0
<TransactionHeader>	Contains customer specific login information	<PNARquest>	1	1/1	-	-	-
<SenderID>	Contains Ingram Micro Sender Identification	<TransactionHeader>	2	1/1	String	0/18	123456789
<ReceiverID>	Contains Customer / Vendor Identification	<TransactionHeader>	2	1/1	String	0/18	987654321
<CountryCode>	2 character ISO country code	<TransactionHeader>	2	1/1	Char	2/2	FT
<LoginID>	Customer specific login	<TransactionHeader>	2	1/1	Char	6/10	UK3833HHD
<Password>	Customer specific password	<TransactionHeader>	2	1/1	String	6/10	Re887Jky52
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	1	0/1	String	1/18	54321
<TransactionHeader>	See Transaction Header	<PNARquest>	1	1/1	-	-	-
<PNAInformation>	Contains product to be queried	<PNARquest>	1	1/*	-	-	-
SKU	Ingrammicro product code	<PNAInformation> attribute	A	1/1	String	1/12	123321
CustomerPartNumber	Customer Part Number (if applicable in IM system)	<PNAInformation> attribute	A	1/1	String	0/8	ABC123456

ManufacturerPartNumber	Manufacturer Part Number	<PNAInformation> attribute	A	1/1	String	0/14	
UPC	Universal Product Code	<PNAInformation> attribute	A	1/1	String	0/12	
Quantity	Qty of stock to base price on	<PNAInformation> attribute	A	0/1	Int	0/*	0010 Default = 1
GovtProgramType	Avail for USA only: Type of Govt Program	<PNAInformation> attribute	A	0/1	String	0/2	PA
GovtEndUserType	Avail for USA only: Type of Govt End User	<PNAInformation> attribute	A	0/1	String	0/2	F
ReservedInventory		<PNAInformation> attribute	A	0/1	Char	1/1	Y (Default = N)
<ShowDetail>	Dictates the level of detail provided in the response. 1- Normal 2- Max detail	<PnARequest>	1	1/1	String	1/1	2
</PNARequest>	<PNARequest> close	-	0	1/1	-	-	-

Notes: If the quantity is omitted, the pricing returned will be for a single unit of the SKU. If it is included, pricing returned represents the unit cost (per unit) for a purchase of this quantity. Pricing may vary based on quantity ordered.

Outbound XML Document

Root element Name: "PNAResponse"

Sample Document: PNAResponse

```

<PNAResponse>
<Version>2.0</Version>
<TransactionHeader>
<SenderID>123456789</SenderID>
<ReceiverID>987654321</ReceiverID>
<ErrorStatus ErrorNumber="ErrorNumber_1">ErrorStatus_1</ErrorStatus>
<DocumentID>{C160DB2B-08A0-475F-BF17-ABF41576652A}</DocumentID>
<TransactionID>CI 123456</TransactionID>
<TimeStamp>2001-07-19T13:36:41</TimeStamp>
</TransactionHeader>
<PriceAndAvailability SKU="123321" Quantity="10">
<Price>117.00</Price>
</SpecialPriceFlag>
<GovEdSpecialPrice>Y</GovEdSpecialPrice>
<ManufacturerPartNumber>2167100-R</ManufacturerPartNumber>
<ManufacturerPartNumberOccurs/>
<VendorNumber>8349</VendorNumber>
<Description>The Product you Ordered</Description>
<ReserveInventoryFlag>N</ReserveInventoryFlag>
<AvailableRebQty>0</AvailableRebQty>

```

```

<Branch ID="40" Name="FT">
  <Availability>-1</Availability>
  <OnOrder>11</OnOrder>
  <ETADate>2001-07-12</ETADate>
</Branch>
<UPC>0760884154205</UPC>
<CustomerPartNumber>H0123456</CustomerPartNumber>
<ManufacturerPartNumber>2167100-R</ManufacturerPartNumber>
  </PriceAndAvailability>
<PNAResponse>

```

Elements/Attributes Description: PNAResponse

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<PNAResponse>	Contains price and availability Response	-	0	1/1	-	-	-
<Version>	Indicates the version of IM-XML	<PNAResponse>	1	1/1	String	3/3	2.0
<TransactionHeader>	Contains customer specific login information	<PNAResponse>	1	1/1	-	-	-
<SenderID>	Contains Ingram Micro Sender Identification	<TransactionHeader>	2	1/1	String	0/18	123456789
<ReceiverID>	Contains Customer / Vendor Identification	<TransactionHeader>	2	1/1	String	0/18	987654321
<ErrorStatus>	Refers to the error description generated by the transaction. Blank if transaction completed successfully	<TransactionHeader>	2	1/1	String	0/100	Error:LoginID or Password or CountryCode is invalid
<ErrorNumber>	Refers to the error number that has been generated by the transaction. This error number will always be associated with an error description. Blank if transaction was successful	<TransactionHeader>	A	1/1	String	0/10	20007
<DocumentID>	Unique ID generated by Ingram Micro	<TransactionHeader>	2	1/1	String	1/40	{9D25E715-F65E-432F-A773-9E22FEA8FBDF}

<TransactionID>	Unique ID generated by customer. This ID will remain constant on submit and response	<TransactionHeader>	2	0/1	String	1/18	54321
<TimeStamp>	Date and Time of Transaction (CET)	<TransactionHeader>	2	1/1	String	1/19	2001-07-12T10:30:41
</TransactionHeader>	Transaction Header Close	<ProductAlertResponse>	1	1/1	-	-	-
<PriceAndAvailability>	Contains PNA information on requested SKU's	<PNAResponse>	1	1/1	-	-	-
<SKU>	Ingrammicro product code	<PriceAndAvailability> attribute	A	1/1	String	0/12	123A321
<Quantity>	Qty queried for	<PriceAndAvailability> attribute	A	1/1	Int	0/*	0010
<Price>	Customer price	<PriceAndAvailability>	2	1/1	String	0/*	117
<SpecialPriceFlag>	Indicates special price	<PriceAndAvailability>	2	1/1	String	0/1	Y
<ManufacturerPartNumber>	Contains Manufacturers Part Number	<PriceAndAvailability>	2	1/1	String	0/*	IATA
<ManufacturerPartNumberOccurs>	Number of times a manufacturer part number occurs	<PriceAndAvailability>	2	1/1	String	0/1	1
<VendorNumber>	Contains Vendor Number	<PriceAndAvailability>	2	1/1	String	0/4	8349
<Description>	Contains Product Description. **Please note: The PNA response provides only a partial product description. For a complete product description, please capture product description from the FTP- Price File Catalogue provided by Ingram	<PriceAndAvailability>	2	1/1	String	0/*	50" Plasma Screen
<ReserveInventoryFlag>	Indicates reserve inventory	<PriceAndAvailability>	2	1/1	String	1/1	N
<AvailableRebQty>	Contains Rebate Quantity	<PriceAndAvailability>	2	1/1	Int	0/*	0
<Branch>	Contains all branch information	<PriceAndAvailability>	2	0/*	-	-	-
ID	Branch ID	<PriceAndAvailability>	A	1/1	String	0/2	20

	number	y> attribute					
Name	Name of region where branch is located	<PriceAndAvailability> attribute	A	0/1	String	0/20	FT
<Availability>	Qty available on hand	<Branch>	3	1/1	Int	0/*	0010
<OnOrder>	Qty on order to the Vendor	<Branch>	3	1/1	Int	0/*	0010
<ETADate>	ETA for arrival of next shipment from the Vendor	<Branch>	3	1/1	Date	0/*	2003-03-11
<Reserve>	Contains Reserved Inventory details.	<Branch>	3	0/*	-	-	-
<Sequence>	Contains a reservation made at this branch	<Reserve>	4	0/*	-	-	-
ID	SequenceID: Reservation sequence number	<Sequence> attribute	A	1/1	Int	0/2	02
Comments	A description of the reservation	<Sequence> attribute	A	1/1	String	0/255	Reserved By Hans
ReservationCode	Reservation type:	<Sequence>	4	1/1	String	0/255	-
ID	ReservationCode ID: Possible values: C – Constrained G – General L – Lap P - Priority	<ReserveCode> attribute	A	1/1	String	1/1	G
ReservedQTY	Quantity originally reserved at this branch	<Sequence>	4	1/1	Int	1/7	2
AvailableQTY	Quantity available at this branch	<Sequence>	4	1/1	Int	1/7	2
EffectiveDate	The date when the reservation became effective.	<Sequence>	4	10/10	Date	YYYY-MM-DD	2009-12-20
ExpiryDate	The date when the reservation will expire and the quantity will be moved back into available stock.	<Sequence>	4	10/10	Date	YYYY-MM-DD	2009-12-18
</Sequence>	<Sequence> close	-	-	-	-	-	-
</Reserve>	<Reserve> Close	-	-	-	-	-	-
</Branch>	<Branch> close	-	-	-	-	-	-
<UPC>	Universal Product Code (if applicable in IM system)	<PriceAndAvailability> attribute	2	0/1	String	0/12	079856395124
<CustomerPartNumber>	Customer Part Number (of applicable in IM system)	<PriceAndAvailability> attribute	2	0/1	String	0/8	ABC12345
<ManufacturerPartNumber>	Manufacturer Part Number	<PriceAndAvailability> attribute	2	0/1	String	0/14	65ASDNHB2300256

</PriceAndAvailability>	<PriceAndAvailability> close	-	1	1/1	-	-	-
</PNAResponse>	PNAResponse> Close	-	0	-	-	-	-

Notes:

For each **PNAInformation** element in the request document, a **PriceAndAvailability** element is returned with child elements containing the pricing and availability information.

If the Branch element is not returned, the SKU no longer exists within the IM system.

An error response:

If a SKU generates an error a SKUStatus element will be populated with the text error message. Possible values are: SKU Not Found, Not Authorized for SKU, Customer Part Number Not Found...

An example of an error message that will be generated:

```
<PriceAndAvailability SKU="1" Quantity="1">
<SKUStatus>ERROR: SKU not found</SKUStatus>
</PriceAndAvailability>
```

Order Change Transaction

Description of Transaction

The Order Change transaction allows for changes to be made to an order after the order creation process but before the order is released. Actions allowed by this transaction are: change shipment address and carrier, add line, change line, delete line, add comment line, release order and cancel order.

Order of Operations

If a document is submitted requesting several changes to an order, changes are performed in the following order: change address, line changes (add, change, delete, comment) and release/cancel order.

Change Shipment Address

Address change information is submitted inside the ShipmentAddressInformation element, a child element of the OrderHeaderInformation element. Most of the child elements contained in the ShipmentAddressInformation element are mandatory, as the transaction process will blank out fields on the order for which no data is submitted. Please note the following when using the address change option:

If an address change is submitted, the address change will take place across all suffixes (distributions) of an order, whether an OrderSuffix is specified in the OrderHeaderInformation element or not.

If an OrderSuffix is specified in the Order Header, any carrier change in this section will apply only to that order suffix.

If no OrderSuffix is specified in the Order Header and a Carrier change is about to take place, the carrier change will affect all distributions. To change several distributions of an order to use different carriers, an Order Change request has to be submitted for each suffix.

Add Line

When adding lines to an order, the 2-character Ingram warehouse number *must* be specified. Please note the following:

If the order was created with the split shipment option set to “N”, then the ShipFromWarehouse element must be populated with the Ship From branch as

designated on the order itself. If another branch is specified, the AddLine element will return an error, or add the line to the single distribution created by Order Entry.

If the order was created with the BackOrder option set to “N” and the line to be added has insufficient stock to satisfy the entire line, AddLine will return an error.

The SplitLine logic resident in the Order Entry transaction *does not* apply here. Lines added by this transaction are added entirely to a single distribution.

Change Line

When changing lines on an order, the Ingram Micro line number *must* already exist on one of the order distributions. There are no checks on the SKU specified in this element meaning that if the SKU submitted in this element is different than the SKU on the order that corresponds to the IngramLineNumber, the SKU on the order is overwritten. The ChangeLine function actually deletes the old order line and inserts a new line. If a change to an already changed line is required, use the NewIngramLineNumber returned on the previous change. In addition, if the CustomerLineNumber fields are being used, these values will have to be resubmitted with every change request as well, as they do not carry over to the changed line automatically.

Delete Line

When deleting lines from an order, both child elements of the DeleteLine element are required – IngramLineNumber and OrderSuffix. Even if the order has only one order suffix, the suffix value must be submitted here. It is advised to take care when deleting lines, as there is no confirmation that a deletion has been requested, and the change is irreversible. In the case of comment line where it spans all distributions (and shares an IngramLineNumber,) the comment is deleted from *all* distributions.

Add Comment

Comment lines are added at the suffix level. If a comment line is to appear on all distributions of an order, the comment will have to be submitted once for each distribution. However, if the same comment is added across multiple distributions, the IngramLineNumber returned for the line will be the same on all distributions.

Release Order

Inserting the character “R” in the OrderActionCode child element of the OrderHeaderInformation element flags the order to be released after all the requested changes have been made. Once an order has been released, it cannot be altered or deleted. If an OrderSuffix is supplied in the OrderHeaderInformation element, the release will only affect the distribution specified. If no OrderSuffix is specified, the entire order will be released.

Cancel Order

Inserting the character “C” in the OrderActionCode child element of the OrderHeaderInformation element will cancel an order. If an OrderSuffix is supplied in

the OrderHeaderInformation element, the cancellation will only affect the distribution specified. If no OrderSuffix is specified, the entire order will be deleted.

Version 2.0

The amount of detail that the Order Change response provides has been enhanced for version 2.0. The changes can be clearly seen by the pale yellow coloring in the response table. All uncolored rows are available through version 1.0.

Inbound XML Document

Root element Name : OrderChangeRequest

Sample Document: OrderChangeRequest

```
<OrderChangeRequest>
<Version>2.0</Version>
<TransactionHeader>
<SenderID>123456789</SenderID>
<ReceiverID>987654321</ReceiverID>
<CountryCode>FT</CountryCode>
<LoginID> UK3833HHD </LoginID>
<Password> Re887Jky52</Password>
<TransactionID>54321</TransactionID>
<TransactionHeader>
<OrderHeaderInformation>
<BranchOrderNumber>2048043</BranchOrderNumber>
<OrderSuffix>21</OrderSuffix>
<CustomerPO>CustomerPO_1</CustomerPO>
<OrderActionCode>R</OrderActionCode>
<ShipmentAddressInformation>
<NewCarrierCode>CN</NewCarrierCode>
<NewCustomerPO>JM564</NewCustomerPO>
<NewShipToAttention>John Smith</NewShipToAttention>
<NewShipToAddress1>Oak House</NewShipToAddress1>
<NewShipToAddress2>55 Stand St</NewShipToAddress2>
<NewShipToAddress3>Unit 1</NewShipToAddress3>
<NewShipToCity>Missisayga</NewShipToCity>
<NewShipToProvince>Ontario</NewShipToProvince>
<NewShipToPostalCode>NR3 4A1</NewShipToPostalCode>
<NewShipToCountryCode>FT</NewShipToCountryCode>
<NewEndUserPO>456123 EU</NewEndUserPO>
<NewBillToSuffix>100</NewBillToSuffix>
<NewShipToSuffix>200</NewShipToSuffix>
</ShipmentAddressInformation>
</OrderHeaderInformation>
<LineInformation>
<AddLine>
<SKU>123321</SKU>
<Quantity>11</Quantity>
<CustomerLineNumber>161</CustomerLineNumber>
<ShipFromWarehouse>20</ShipFromWarehouse>
</AddLine>
<ChangeLine>
<IngramLineNumber>003</IngramLineNumber>
<SKU>123B321</SKU>
```

```

<Quantity>4</Quantity>
<CustomerLineNumber>055</CustomerLineNumber>
<Suffix>21</Suffix>
</ChangeLine>
<DeleteLine>
<IngramLineNumber>004</IngramLineNumber>
<Suffix>11</Suffix>
</DeleteLine>
<AddComment>
<CommentText>Special offer Promotion</CommentText>
<CustomerLineNumber>055</CustomerLineNumber>
<Suffix>21</Suffix>
</AddComment>
</LineInformation>
<ShowDetail>2</ShowDetail>
</OrderChangeRequest>

```

Elements/Attributes Description: OrderChangeRequest

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<OrderChangeRequest>	Contains order change information	-	0	1/1	-	-	-
<Version>	XML Version	<OrderChangeRequest>	1	1/1	String	3/3	2.0
<TransactionHeader>	Contains customer specific login information	<OrderChangeRequest>	1	1/1	-	-	-
<SenderID>	Contains Ingram Micro Sender Identification	<TransactionHeader>	2	1/1	String	0/18	123456789
<ReceiverID>	Contains Customer / Vendor Identification	<TransactionHeader>	2	1/1	String	0/18	987654321
<CountryCode>	2 character ISO country code	<TransactionHeader>	2	1/1	Char	2/2	FT
<LoginID>	Customer specific login	<TransactionHeader>	2	1/1	Char	6/10	UK3833HHD
<Password>	Customer specific password	<TransactionHeader>	2	1/1	String	6/10	Re887Jky52
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	1	0/1	String	1/18	54321
</TransactionHeader>	Transaction Header Close	<OrderChangeRequest>	1	1/1	-	-	-
<OrderHeaderInformation>	Contains order header information	<OrderChangeRequest>	1	1/1	-	-	-
<BranchOrderNumber>	Ingrammicro order number	<OrderheaderInformation>	2	1/1	String	7/7	2012345
<OrderSuffix>	Ingrammicro order number suffix	<OrderheaderInformation>	2	0/1	String	2/2	11
<CustomerPO>	Customer purchase order number	<OrderheaderInformation>	2	0/1	String	0/18	Customer Order1
<OrderActionCode>	Action code for the order	<OrderheaderInformation>	2	0/1	Char	0/1	R
<ShipmentAddressIn	Contains shipment	<OrderheaderInformation>	2	0/1	-	-	-

formation>	address information	on>					
<NewCarrierCode>	New 2 character carrier code	<ShipmentAddressInformation>	3	1/1	String	2/2	CN
<NewCustomerPO>	New customer purchase order number	<ShipmentAddressInformation>	3	1/1	String	1/18	LM2884
<NewShipToAttention>	New attention details	<ShipmentAddressInformation>	3	1/1	String	1/35	John Smith
<NewShipToAddress1>	Identify the Company Name or the person to deliver to.	<ShipmentAddressInformation>	3	0/1	String	1/35	Oak House Company
<NewShipToAddress2>	New Street Address	<ShipmentAddressInformation>	3	0/1	String	1/35	55 Strand Street
<NewShipToAddress3>	Additional address info (Unit, buzzer etc.)	<ShipmentAddressInformation>	3	0/1	String	0/35	Unit 1208
<NewShipToCity>	New city	<ShipmentAddressInformation>	3	0/1	String	1/21	Norwich
<NewShipToProvince>	Country code of the original order	<ShipmentAddressInformation>	3	0/1	String	2/2	Ontario
<NewShipToPostalCode>	New post/zip code	<ShipmentAddressInformation>	3	0/1	String	0/9	NR3 4A1
<NewShipToCountryCode>	ISO Country Code, for use in the Nordics only.	<ShipmentAddressInformation>	3	0/1	String	0/2	US
<NewEndUserPO>	New end user PO	<ShipmentAddressInformation>	3	0/1	String	0/18	Eorder1
<NewBillToSuffix>	New Location or flooring company that the invoice amount is to be billed to	<ShipmentAddressInformation>	3	0/1	String	3/3	100
<NewShipToSuffix>	New store location or distribution centre to ship the order to	<ShipmentAddressInformation>	3	0/1	String	3/3	200
</ShipmentAddressInformation>	<ShipmentAddressInformation> close	<OrderHeaderInformation>	2	0/1	-	-	-
</OrderHeaderInformation>	<OrderHeaderInformation> close	<OrderChangeRequest>	1	1/1	-	-	-
<LineInformation>	Contains line change /add information	<OrderChangeRequest>	1	0/1	-	-	-
<AddLine>	Contains line information to be added	<LineInformation>	2	0/*	-	-	-
<SKU>	Ingrammicro product code	<AddLine>	3	1/1	String	1/12	123321
<Quantity>	Qty of stock required	<AddLine>	3	1/1	Int	0/*	010
<CustomerLineNumber>	Customer line number	<AddLine>	3	0/1	String	1/3	001
<ShipFromWarehouse>	Warehouses to source the order from	<AddLine>	3	1/1	String	2/2	20
</AddLine>	<AddLine> close	<LineInformation>	2	0/*	-	-	-
<ChangeLine>	Contains the required information to change	<LineInformation>	2	0/*	-	-	-
<IngramLineNumber>	Ingrammicro line number to be changed	<ChangeLine>	3	1/1	String	3/3	010

<SKU>	New Ingrammicro product code	<ChangeLine>	3	1/1	String	7/7	123A321
<Quantity>	New qty of stock required	<ChangeLine>	3	1/1	Int	0/*	0010
<CustomerLineNumber>	New customer line number	<ChangeLine>	3	0/1	String	1/3	001
<Suffix>	Ingrammicro order number suffix to be changed	<ChangeLine>	3	0/1	String	2/2	11
</ChangeLine>	<ChangeLine> close	<LineInformation>	2	0/*	-	-	-
<DeleteLine>	Contains line details to delete	<LineInformation>	2	0/*	-	-	-
<IngramLineNumber>	Ingrammicro line number to delete	<DeleteLine>	3	1/1	String	3/3	001
<Suffix>	Ingrammicro order number suffix	<DeleteLine>	3	1/1	String	2/2	11
</DeleteLine>	<DeleteLine> close	<LineInformation>	2	0/*	-	-	-
<AddComment>	Contains comments to be added	<LineInformation>	2	0/*	-	-	-
<CommentText>	Comment text	<AddComment>	4	1/1	String	1/35	Please deliver soon
<CustomerLineNumber>	Customer line number	<AddComment>	4	0/1	String	1/3	001
<Suffix>	Ingrammicro order number suffix	<AddComment>	4	1/1	String	2/2	11
</AddComment>	<AddComment> close	<LineInformation>	3	0/*	-	-	-
</LineInformation>	<LineInformation> close	<OrderChangeRequest>	1	0/1	-	-	-
<ShowDetail>	<Show Details>	<OrderChangeRequest>		0/1	-	-	-
</OrderChangeRequest>	<OrderChangeRequest> close	-	0	1/1	-	-	-

Notes:

It is not possible to change the ship from province from the originally specified ISO country code.

Outbound XML Document

Root element Name : OrderChangeResponse

Sample Document: OrderChangeResponse

```

<OrderChangeResponse>
  <Version>2.0</Version>
  <TransactionHeader>
    <SenderID>123456789</SenderID>
    <ReceiverID>987654321</ReceiverID>
    <ErrorStatus ErrorNumber=""></ErrorStatus>
    <DocumentID></DocumentID>
    <TransactionID>54321</TransactionID>
    <TimeStamp>2003-07-09T00:00:00</TimeStamp>
  </TransactionHeader>
  <OrderHeaderInformation>

```

```

<OrderHeaderError>OrderHeaderError_1</OrderHeaderError>
<BranchOrderNumber>2048043</BranchOrderNumber>
<OrderSuffix>10</OrderSuffix>
<CustomerPO>CustomerPO_1</CustomerPO>
</OrderHeaderInformation>
<LineInformation>
<AddLine>
  <LineError></LineError>
  <SKU>123321</SKU>
  <Quantity>3</Quantity>
  <ShippedQuantity>0</ShippedQuantity>
  <BackOrderQuantity>3</BackOrderQuantity>
  <BackOrderETA>20/08/2003</BackOrderETA>
  <IngramLineNumber>020</IngramLineNumber>
  <CustomerLineNumber />
  <UnitPrice>2.17</UnitPrice>
  <ShipFromWarehouse>20</ShipFromWarehouse>
  <LocalCurrencyPrice>2.17</LocalCurrencyPrice>
  <PriceDerivedFlag>A</PriceDerivedFlag>
  <CarrierCode>OT</CarrierCode>
  <FreightRate>20</FreightRate>
  <TransitDays>1</TransitDays>
</AddLine>
  <ChangeLine>
    <LineError></LineError>
  <SKU>123321</SKU>
  <Quantity>2</Quantity>
  <ShippedQuantity>0</ShippedQuantity>
  <BackOrderQuantity>2</BackOrderQuantity>
  <BackOrderETA>20/08/2003</BackOrderETA>
  <OldIngramLineNumber>020</OldIngramLineNumber>
  <NewIngramLineNumber>030</NewIngramLineNumber>
  <CustomerLineNumber>001<CustomerLineNumber />
  <UnitPrice>2.17</UnitPrice>
  <Suffix>11</Suffix>
  <LocalCurrencyPrice>2.17</LocalCurrencyPrice>
  <PriceDerivedFlag></PriceDerivedFlag>
  <CarrierCode>OT</CarrierCode>
  <FreightRate>20</FreightRate>
  <TransitDays>1</TransitDays>
</ChangeLine>
  <DeleteLine>
    <LineError></LineError>
  <IngramLineNumber>020</IngramLineNumber>
  </DeleteLine>
  <AddComment>
    <LineError></LineError>
  <IngramLineNumber>030</IngramLineNumber>
  <Suffix>11</Suffix>
  </AddComment>
</LineInformation>
</OrderChangeResponse>

```

Elements/Attributes Description: OrderChangeResponse

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<OrderChangeResponse>	Contains order change confirmation	-	0	1/1	-	-	-
<Version>	XML version	<OrderChangeResponse>	1	1/1	String	3/3	2.0
<TransactionHeader>	Contains transaction header information	<OrderChangeResponse>	1	1/1	-	-	-
<SenderID>	Sender identification	<TransactionHeader>	2	1/1	Char	0/18	987654321
<ReceiverID>	Receiver identification	<TransactionHeader>	2	1/1	Char	0/18	123456789
<ErrorStatus>	Refers to the error description generated by the transaction. Blank if transaction was successful	<TransactionHeader>	2	1/1	String	0/100	ERROR: Login ID is invalid
ErrorNumber	Refers to the error number that has been generated by the transaction. Each error number is associated with a unique error message. Blank if transaction was successful	Attribute of <ErrorStatus>	A	1/1	String	0/10	20007
<DocumentID>	Unique ID generated by Ingram Micro	<TransactionHeader>	2	1/1	String	1/40	{9D25E715-F65E-432F-A773-9E22FEA8FBDF}
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	2	0/1	Char	1/18	12345
<TimeStamp>	Date and time of transaction (CET)	<TransactionHeader>	2	1/1	Char	1/19	2003-07-07T00:00:00
</TransactionHeader>	Close of transaction header	<OrderRequest>	1	1/1	-	-	-
<OrderHeaderInformation>	Contains order information	<OrderChangeResponse>	1	1/1	-	-	-
<OrderHeaderError>	Error messages from transaction processing	<OrderHeaderInformation>	2	0/1	String	1/1024	Order Not Released
<BranchOrderNumber>	Ingrammicro order number	<OrderHeaderInformation>	2	1/1	String	7/7	2012345
<OrderSuffix>	Ingrammicro order number suffix	<OrderHeaderInformation>	2	0/1	String	2/2	11
<CustomerPO>	Customer purchase order number	<OrderHeaderInformation>	2	0/1	String	0/18	COrder1
</OrderHeaderInformation>	<OrderHeaderInformation> close	<OrderChangeResponse>	1	1/1	-	-	-
<LineInformation>	Contains information on the lines changed	<OrderChangeResponse>	1	01	-	-	-
<AddLine>	Contains line information added	<LineInformation>	2	0/*	-	-	-
<LineError>	Contains errors on	<AddLine>	3	0/1	String	1/255	Part

	adding line						cannot be backordered
<SKU>	Ingrammicro product code	<AddLine>	3	1/1	String	1/12	123321
<Quantity>	Qty ordered	<AddLine>	3	1/1	Int	0/*	0010
<ShippedQuantity>	Qty shipped	<AddLine>	3	1/1	Int	0/*	0010
<BackOrderQuantity>	Qty backordered	<AddLine>	3	1/1	Int	0/*	0010
<BackOrderETA>	If available, the ETA for backordered product to arrive at Ingrammicro	<AddLine>	3	0/1	String	0/10	10/03/2003
<IngramLineNumber>	Ingrammicro line number	<AddLine>	3	1/1	String	3/3	010
<CustomerLineNumber>	Customer line number	<AddLine>	3	0/1	String	1/3	001
<UnitPrice>	Single unit cost of the ordered SKU	<AddLine>	3	1/1	String	0/*	123.26
<ShipFromWarehouse>	Ingrammicro warehouse number	<AddLine>	3	1/1	String	2/2	20
<LocalCurrencyPrice>	Contains Local Currency Price	<AddLine>	3	1/1	Num	0/*	2.17
<PriceDerivedFlag>	Refers to price code	<AddLine>	3	1/1	String	0/1	A
<CarrierCode>	Carrier Code	<AddLine>	3	1/1	String	0/2	OT
<FreightRate>	Freight Rate / Costs	<AddLine>	3	1/1	Num	0/*	20
<TransitDays>	No. of Transit Days	<AddLine>	3	1/1	Num	0/2	1
</AddLine>	<AddLine> close	<LineInformation>	2	0/*	-	-	-
<ChangeLine>	Contains line change information	<LineInformation>	2	0/*	-	-	-
<LineError>	Error message from line change processing	<ChangeLine>	3	0/1	String	1/255	Line number not found
<SKU>	Ingrammicro product code	<ChangeLine>	3	1/1	String	1/12	123A321
<Quantity>	New ordered Qty	<ChangeLine>	3	1/1	Int	0/*	0010
<ShippedQuantity>	Number of new qty shipped	<ChangeLine>	3	1/1	Int	0/*	0010
<BackOrderQuantity>	Number of new qty backordered	<ChangeLine>	3	1/1	Int	0/*	0010
<BackOrderETA>	If available, the ETA date for back ordered product to arrive in Ingram Micro's warehouse	<ChangeLine>	3	0/1	String	0/10	10/03/2003
<OldIngramLineNumber>	Ingrammicro line number before change	<ChangeLine>	3	1/1	String	3/3	020
<NewIngramLineNumber>	Ingrammicro line number after change	<ChangeLine>	3	0/1	String	3/3	030
<CustomerLineNumber>	Customer line number	<ChangeLine>	3	0/1	String	1/3	001
<UnitPrice>	Single unit cost of ordered SKU	<ChangeLine>	3	1/1	String	0/*	123.26
<Suffix>	Ingrammicro order number suffix	<ChangeLine>	3	0/1	String	2/2	11
<LocalCurrencyPrice>	Contains Local Currency Price	<ChangeLine>	3	1/1	Num	0/*	2.17
<PriceDerivedFlag>	Refers to price code	<ChangeLine>	3	1/1	String	0/1	A

<CarrierCode>	Carrier Code	<ChangeLine>	3	1/1	String	0/2	OT
<FreightRate>	Freight Rate / Costs	<ChangeLine>	3	1/1	Num	0/*	20
<TransitDays>	No. of Transit Days	<ChangeLine>	3	1/1	Num	0/2	1
</ChangeLine>	<ChangeLine> close	<LineInformation>	2	0/*	-	-	-
<DeleteLine>	Contains line delete information	<LineInformation>	2	0/*	-	-	-
<LineError>	Error in line deletion	<DeleteLine>	3	0/1	String	1/255	Order # not found
<IngramLineNumber>	Ingrammicro line number	<DeleteLine>	3	1/1	String	3/3	010
</DeleteLine>	<DeleteLine> close	<LineInformation>	2	0/*	-	-	-
<AddComment>	Contains comment information	<LineInformation>	2	0/*	-	-	-
<LineError>	Error in comment line	<AddComment>	3	0/1	String	1/255	Order # not found
<IngramLineNumber>	Ingrammicro line number	<AddComment>	3	1/1	String	3/3	010
<Suffix>	Ingrammicro order number suffix	<AddComment>	3	0/1	String	2/2	11
</AddComment>	<AddComment> close	<LineInformation>	2	0/*	-	-	-
</LineInformation>	<LineInformation> close	<OrderChangeResponse>	1	01	-	-	-
</OrderChangeResponse>	<OrderChangeResponse> close	-	0	1/1	-	-	-

An error response:

An example of an error message that will be generated if the LoginID, Password or CountryCode are incorrect:

```

<TransactionHeader>
<
  <ErrorStatus ErrorNumber="20007">ERROR:
    LoginID, or Password or CountryCode is
    incorrect</ErrorStatus>
<
  <DocumentID>{0598CBDE-30B5-497E-9096-CAC5992D4AFD}
  </DocumentID>
<
  TransactionID>789456</TransactionID>
<
  TimeStamp>2001-07-16T17:25:58</TimeStamp>
</TransactionHeader>

```

DType Order Entry Transaction

Description of Transaction

The DTypeOrder (Direct ship order) transaction is a real-time transaction that creates – finalizes and releases a DTypeOrder. This type of order is only used for License / Warranty type orders where the End-User details are required by the Vendor. For basic fulfillment orders direct to the End-User where the End-User details are not required by the Vendor, a standard Order Request should be used.

Create the order

The request area contains general customer order information and options, such as purchase order number, shipping address, billing account, end user information.

Unlike the order entry transaction it is not possible to specify multiple warehouses and the default warehouse number should be used for all DType orders. If you don't know your default warehouse, your Ingram Micro Sales representative can provide this to you.

Please provide Carrier Code "OT" when placing License / Warranty orders.

The end user information section is specific to this type of order.

Only SKUs with a Class Code ="X" can be processed using the Dtype Order transaction. If Class Code is not included in your FTP Price file, you can request that it is added by contacting 1-800-616-4665.

Each order must only contain SKUs for a single vendor, as it is not possible to combine vendor Dtype products on a single order.

Example:

IM SKU	Vendor#	Vendor Name
311112	3433	Symantec
433433	3433	Symantec
234444	2500	Microsoft

If you wished to order the 3 skus above, you would send two separate Dtype Order Entry requests, which would create 2 Ingram Micro order numbers. One would be for the Symantec SKUs and the second would contain the Microsoft SKUs.

Order 1: The Symantec SKUs

IM SKU	Vendor#	Vendor Name
311112	3433	Symantec
433433	3433	Symantec

Order 2: The Microsoft SKUs

IM SKU	Vendor#	Vendor Name
234444	2500	Microsoft

If vendor# is not included in your FTP Price file, you can request that it is added by contacting 1-800-616-4665.

Note: EndUserCountryCode is not same as country code in the TransactionHeader. EndUserCountryCode is "US" for USA and "CA" for Canada.

Inbound XML Document**Root element Name : DTypeOrderRequest"****Sample Document: DTypeOrderRequest**

```

<DTypeOrderRequest>
  <Version>2.0</Version>
  <TransactionHeader>
    <SenderID>123456789</SenderID>
    <ReceiverID>987654321</ReceiverID>
    <CountryCode>FT</CountryCode>
    <LoginID>UK3833HHD</LoginID>
    <Password>Re887Jky52</Password>
    <TransactionID>54321</TransactionID>
  </TransactionHeader>
  <OrderHeaderInformation>
    <BillToSuffix/>
    <AddressingInformation>
      <CustomerPO>DtypePO2</CustomerPO>
      <ShipToAttention>Marion Grange</ShipToAttention>
      <EndUserPO>EUP32223</EndUserPO>
      <ShipTo>
        <Address>
          <ShipToAddress1>ABC Co.</ShipToAddress1>
          <ShipToAddress2>12 AdalenStreet</ShipToAddress2>
          <ShipToAddress3> </ShipToAddress3>
          <ShipToCity>Toronto</ShipToCity>
          <ShipToProvince>Ontario</ShipToProvince>
          <ShipToPostalCode>NO3 9FG</ShipToPostalCode>
        </Address>
      </ShipTo>
    </AddressingInformation>
    <ProcessingOptions>
      <CarrierCode>OT</CarrierCode>
      <ShipmentOptions>
        <BackOrderFlag>Y</BackOrderFlag>
      </ShipmentOptions>
    </ProcessingOptions>
  </OrderHeaderInformation>
</DTypeOrderRequest>

```

```

    <ShipFromBranches>20</ShipFromBranches>
  </ShipmentOptions>
</ProcessingOptions>
<EndUserInformation>
  <ContactName>Jacob Lyons</ContactName>
  <PhoneNumber>01604575550</PhoneNumber>
  <ExtensionNumber>33228</ExtensionNumber>
  <FaxNumber>01604575555</FaxNumber>
  <Address1>192 Linford Street</Address1>
  <Address2> </Address2>
  <City>Toronto</City>
  <Province>ON</Province>
  <PostalCode>MK9 8GG</PostalCode>
  <EndUserCountryCode>FT</EndUserCountryCode>
  <CompanyName>Electron Micro</CompanyName>
  <VATNumber>123456</VATNumber>
  <AuthorizationNumber>A-123456</AuthorizationNumber>
  <PricingLevel>P</PricingLevel>
  <EmailAddress>jlyons@Emicro.com</EmailAddress>
</EndUserInformation>
<ResellerInformation>
  <SalesRepName>Frank Fletcher</SalesRepName>
  <ResellerContactName>Geraldine Duberry</ResellerContactName>
  <ResellerPhoneNumber>01922 533388</ResellerPhoneNumber>
  <ResellerFaxNumber>01922 533389</ResellerFaxNumber>
  <ResellerAddress1>Bank House</ResellerAddress1>
  <ResellerAddress2>Brompton</ResellerAddress2>
  <ResellerCity>Toronto</ResellerCity>
  <ResellerProvince>ON</ResellerProvince>
  <ResellerPostalCode>BR2 4TT</ResellerPostalCode>
  <ResellerCompanyName>RightOnIT</ResellerCompanyName>
  <ResellerEmailAddress>gdub@rightonit.com</ResellerEmailAddress>
</ResellerInformation>
</OrderHeaderInformation>
<OrderLineInformation>
  <ProductLine>
    <SKU>146541</SKU>
    <Quantity>1</Quantity>
    <CustomerLineNumber/>
    <CustomerPartNumber></CustomerPartNumber>
    <UPC></UPC>
    <ManufacturerPartNumber></ManufacturerPartNumber>
    <RequestedPrice></RequestedPrice>
  </ProductLine>
  <CommentLine>
    <CommentText>Many thanks</CommentText>
  </CommentLine>
</OrderLineInformation>
  <ShowDetail>2</ShowDetail>
</DTypeOrderRequest>

```

Elements/Attributes Description: DTypeOrderRequest

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<DTypeOrderRequest>	Contains the Dtype Order Request	-	0	1/1	-	-	-
<Version>	XML Version	<DTypeOrderRequest>	1	1/1	String	3/3	2.0
<TransactionHeader>	Transaction Header	<DTypeOrderRequest>	1	1/1	-	-	-
<SenderID>	Sender identification	<TransactionHeader>	2	1/1	String	0/18	123456789
<ReceiverID>	Sender identification	<TransactionHeader>	2	1/1	String	0/18	987654321
<CountryCode>	2 character ISO country code	<TransactionHeader>	2	1/1	Char	2/2	FT
<LoginID>	Customer specific login	<TransactionHeader>	2	1/1	String	6/10	TESTLogin
<Password>	Customer specific password	<TransactionHeader>	2	1/1	String	6/10	Pass221RtF
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	2	0/1	String	1/18	123567
</TransactionHeader>	Close of transaction header	<DTypeOrderRequest>	1	1/1	String	-	-
<OrderHeaderInformation>	Contains order header information.	<DTypeOrderRequest>	1	1/1	-	-	-
<BillToSuffix>	Contains alternate Bill-to code	<OrderHeaderInformation>	2	0/1	String	3/3	100
<AddressingInformation>	Contains address information	<OrderHeaderInformation>	2	1/1	-	-	-
<CustomerPO>	Customer purchase order number	<AddressingInformation>	3	1/1	String	0/18	Order1
<ShipToAttention>	Attention name	<AddressingInformation>	3	1/1	String	0/35	Mr Smith
<EndUserPO>	End user purchase order number	<AddressingInformation>	3	0/1	String	0/18	EOrder1
<ShipTo>	Contains the ship-to details	<AddressingInformation>	3	0/1	-	-	-
<Address>	Contains address information	<ShipTo>	4	0/1	-	-	-
<Address1>	Must contain Company name or the person who the shipment should be delivered to.	<Address>	5	1/1	String	1/35	ABC Company
<Address2>	Street Address	<Address>	5	0/1	String	1/35	12 High Street
<Address3>	Provide additional addressinfo (Unit, buzzer etc.)	<Address>	5	0/1	String	0/35	Unit 12
<ShipToCity>	City name	<Address>	5	1/1	String	1/21	Toronto
<ShipToProvince>	State or Province ISO code	<Address>	5	0/1	String	2/2	ON
<ShipToPostalCode>	Postal/zip code	<Address>	5	1/1	String	0/9	MK1 1AA
<ShipToCountryCode>	ISO Country Code	<Address>	5	0/1	String	0/2	CA
</Address>	<Address> close	<ShipTo>	4	0/1	-	-	-

<Suffix>	Contains a Ship-to code	<ShipTo>	4	0/1	-	-	-
<ShipToSuffix>	Identifies a store location or distribution centre	<Suffix>	5	1/1	String	3/3	200
</Suffix>	<Suffix> close	<ShipTo>	4	0/1	-	-	-
</ShipTo>	<ShipTo> close	<AddressingInformation>	3	0/1	-	-	-
</AddressingInformation>	<AddressingInformation> close	<OrderHeaderInformation>	2	1/1	-	-	-
<ProcessingOptions>	Contains order processing information	<OrderHeaderInformation>	2	1/1	-	-	-
<CarrierCode>	Carrier code	<ProcessingOptions>	3	1/1	String	2/2	OT
<ShipmentOptions>	Contains shipment processing options	<ProcessingOptions>	3	1/1	-	-	-
<BackOrderFlag>	Code setting for backorders	<ShipmentOptions>	4	1/1	Char	1/1	Y
<ShipFromBranches>	Ingrammicro warehouse branch numbers to be sourced for product	<ShipmentOptions>	4	1/1	String	0/10	String
</ShipmentOptions>	<ShipmentOptions> close	<ProcessingOptions>	3	1/1	-	-	-
</ProcessingOptions>	<ProcessingOptions> close	<OrderHeaderInformation>	2	1/1	-	-	-
<EndUserInformation>	Contains End-User information for the Vendor	<OrderHeaderInformation>	2	1/1	-	-	-
<ContactName>	EU contact name	<EndUserInformation>	3	1/1	String	1/30	Jacob Lyons
<PhoneNumber>	EU phone number	<EndUserInformation>	3	1/1	String	1/15	01604 123456
<ExtensionNumber>	EU extension number	<EndUserInformation>	3	0/1	String	0/5	12345
<FaxNumber>	EU fax number	<EndUserInformation>	3	1/1	String	1/15	01604 564403
<Address1>	EU address line 1	<EndUserInformation>	3	1/1	String	1/35	192 Lindford Street
<Address2>	EU address line 2	<EndUserInformation>	3	1/1	String	1/35	Linslow
<City>	EU city	<EndUserInformation>	3	1/1	String	1/21	Toronto
<Province>	EU province	<EndUserInformation>	3	1/1	String	2/2	ON
<PostalCode>	EU postal code	<EndUserInformation>	3	1/1	String	0/9	NW1 1AA
<EndUserCountryCode>	EU ISO country code	<EndUserInformation>	3	1/1	String	2/2	FT
<CompanyName>	EU company name	<EndUserInformation>	3	1/1	String	1/30	Electron Micro
<VATNumber>	EU VAT number	<EndUserInformation>	3	0/1	String	0/14	123456
<AuthorizationNumber>	EU authorisation number	<EndUserInformation>	3	0/1	String	0/20	12ABC345
<PricingLevel>	EU pricing level (per Vendors license rules)	<EndUserInformation>	3	0/1	String	0/1	A
<EmailAddress>	EU e-mail address	<EndUserInformation>	3	1/1	String	3/50	A@B.COM
</EndUserInformation>	<EndUserInformation> close	<OrderHeaderInformation>	2	1/1	-	-	-
<ResellerInformation>	Contains reseller information	<OrderHeaderInformation>	2	1/1	-	-	-

<SalesRepName>	RS sales representative	<ResellerInformation>	3	1/1	String	1/20	Frank Fletcher
<ResellerContactName>	RS contact name	<ResellerInformation>	3	1/1	String	1/30	Geraldine Duberry
<ResellerPhoneNumber>	RS phone number	<ResellerInformation>	3	1/1	String	1/15	01238 123606
<ResellerFaxNumber>	RS fax number	<ResellerInformation>	3	1/1	String	1/15	01238 156130
<ResellerAddress1>	RA address line 1	<ResellerInformation>	3	1/1	String	1/35	Bank House
<ResellerAddress2>	RS address line 2	<ResellerInformation>	3	1/1	String	1/35	Brompton
<ResellerCity>	RS city	<ResellerInformation>	3	1/1	String	1/21	Toronto
<ResellerProvince>	RS country code	<ResellerInformation>	3	1/1	String	2/2	ON
<ResellerPostalCode>	RS post code	<ResellerInformation>	3	1/1	String	0/9	BR2 4TT
<ResellerCompanyName>	RS company name	<ResellerInformation>	3	1/1	String	1/30	RightOnIt
<ResellerEmailAddress>	RS email address	<ResellerInformation>	3	1/1	String	3/35	<u>A@B.COM</u>
</ResellerInformation>	<ResellerInformation> close	<OrderHeaderInformation>	2	1/1	-	-	-
</OrderHeaderInformation>	<OrderHeaderInformation> close	<DTypeOrderRequest>	1	1/1	-	-	-
<OrderLineInformation>	Contains order line information	<DTypeOrderRequest>	1	1/1	-	-	-
<ProductLine>	Contains product line information	<OrderLineInformation>	2	1/1	-	-	-
<SKU>	Ingrammicro product code	<ProductLine>	3	1/1	String	1/12	123A211
<Quantity>	Qty of product required	<ProductLine>	3	1/1	Int	0/*	0010
<CustomerLineNumber>	Customer line number	<ProductLine>	3	0/1	String	0/3	001
<CustomerPartNumber>	Customer Part Number (if applicable in IM system)	<ProductLine>	3	0/1	String	0/8	ABC12345
<UPC>	Universal Product Code (if applicable in IM system)	<ProductLine>	3	0/1	String	0/12	079856395124
<ManufacturerPartNumber>	Manufacturer Part Number	<ProductLine>	3	0/1	String	1/14	65ASDN HB2300256
<RequestedPrice>	Partner requested price (if applicable to partner setup)	<ProductLine>	3	0/1	String	2/10	25.00
</ProductLine>	<ProductLine> close	<OrderLineInformation>	2	1/1	-	-	-
<CommentLine>	Contains comment information	<OrderLineInformation>	2	0/1	-	-	-
<CommentText>	The comment text	<CommentLine>	3	1/1	String	1/35	Please deliver before Tuesday
</CommentLine>	<CommentLine> close	<OrderLineInformation>	2	0/1	-	-	-
</OrderLineInformation>	<OrderInformation> close	<DTypeOrderRequest>	1	1/1	-	-	-

<ShowDetail>	Detailed / normal, increased response	<DtypeOrderRequest>	1	1/1	String	1/1	1,2
</DtypeOrderRequest>	<DtypeOrderRequest> close	-	0	1/1	-	-	-

Outbound XML Document

Root element Name : DTypeOrderResponse”

Sample Document: DTypeOrderResponse

```

<DtypeOrderResponse>
  <Version>2.0</Version>
  <TransactionHeader>
    <SenderID>123456789</SenderID>
    <ReceiverID>987654321</ReceiverID>
    <ErrorStatus ErrorNumber=""></ErrorStatus>
    <DocumentID></DocumentID>
    <TransactionID>54321</TransactionID>
    <TimeStamp>2003-07-09T00:00:00</TimeStamp>
  </TransactionHeader>
  <OrderInfo>
    <OrderNumbers>
      <BranchOrderNumber>2048044</BranchOrderNumber>
    <CustomerPO>CustomerPO_1</CustomerPO>
    <ShipToAddress1>ABC Co.</ShipToAddress1>
    <ShipToAddress2>Adalen Street</ShipToAddress2>
    <ShipToCity>Toronto</ShipToCity>
    <ShipToProvince>ON</ShipToProvince>
    <ShipToPostalCode>NO3 9FG</ShipToPostalCode>
    <AddressErrorMessage AddressErrorType="" />
    <ContractNumber />
    <OrderSuffix Suffix="11">
      <DistributionWeight>0</DistributionWeight>
      <SuffixErrorResponse SuffixErrorType="" />
      <Carrier CarrierCode="OT">Other</Carrier>
    <LineInformation>
      <ProductLine>
        <LineError />
        <SKU>943887</SKU>
        <ManufacturerPartNumber>BXR-12345</ManufacturerPartNumber>
        <UPC>736521456985</UPC>
        <CustomerPartNumber>ABC12345</CustomerPartNumber>
        <UnitPrice>449.93</UnitPrice>
        <IngramLineNumber>020</IngramLineNumber>
        <ShipFromBranch>40</ShipFromBranch>
        <OrderQuantity>2</OrderQuantity>
        <AllocatedQuantity>2</AllocatedQuantity>
        <BackOrderedQuantity>0</BackOrderedQuantity>
        <BackOrderETADate>2003-07-10</BackOrderETADate>
        <PriceDerivedFlag />
        <FreightRate>0</FreightRate>
        <TransitDays>1</TransitDays>
        <BillToSuffix>200</BillToSuffix>
      </ProductLine>
    <CommentLine>
      <CommentLineNumber>003</CommentLineNumber>
      <CommentText>Please deliver to green door</CommentText>
    </CommentLine>
  </LineInformation>
</OrderInfo>
</DtypeOrderResponse>

```



```

</CommentLine>
</LineInformation>
</OrderSuffix>
</OrderNumbers>
</OrderInfo>
</DtypeOrderResponse>

```

Elements/Attributes Description: DtypeOrderResponse

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<DtypeOrderResponse>	Root element	-	0	1/1	-	-	-
<Version>	XML version	<DtypeOrderResponse>	1	1/1	String	3/3	2.0
<TransactionHeader>	Contains transaction header information	<DtypeOrderResponse>	1	1/1	-	-	-
<SenderID>	Sender identification	<TransactionHeader>	2	1/1	Char	0/18	987654321
<ReceiverID>	Receiver identification	<TransactionHeader>	2	1/1	Char	0/18	123456789
<ErrorStatus>	Refers to the error description generated by the transaction. Blank if transaction was successful	<TransactionHeader>	2	1/1	String	0/100	ERROR: Login ID is invalid
ErrorNumber	Refers to the error number that has been generated by the transaction. Each error number is associated with a unique error message. Blank if transaction was successful	Attribute of <ErrorStatus>	A	1/1	String	0/10	20007
<DocumentID>	Unique ID generated by Ingram Micro	<TransactionHeader>	2	1/1	String	1/40	{9D25E715-F65E-432F-A773-9E22FEA8FBDF}
<TransactionID>	Can be used for customer reference ID	<TransactionHeader>	2	0/1	Char	1/18	12345
<TimeStamp>	Date and time of transaction (CET)	<TransactionHeader>	2	1/1	Char	1/19	2003-07-07T00:00:00
</TransactionHeader>	Close of transaction header	<OrderRequest>	1	1/1	-	-	-
<OrderInfo>	Contains order information	-	1	1/1	-	-	-
<OrderNumbers>	Contains order number information	<OrderInfo>	2	1/1	-	-	-
<BranchOrderNumber>	Ingrammicro order number	<OrderNumbers>	3	1/1	String	7/7	2048043
<CustomerPO>	Customer order number	<OrderNumbers>	3	1/1	String	0/18	2323232
<ShipToAddress1>	Address line 1	<OrderNumbers>	3	1/1	String	1/35	Redhouse
<ShipToAddress2>	Address line 2	<OrderNumbers>	3	1/1	String	1/35	55 The Street
<ShipToCity>	Name of city	<OrderNumbers>	3	1/1	String	1/21	Toronto

<ShipToProvince>	2 character ISO country code	<OrderNumbers>	3	1/1	String	2/2	ON
<ShipToPostalCode>	Postal / zip code	<OrderNumbers>	3	1/1	String	1/9	SW1 3IM
<AddressErrorMessage>	Refers to the error description generated by	<OrderNumbers>	3	1/1	String	0/100	Invalid zipcode
<AddressErrorType>	Refers to an error number generated by the address. Each error number is associated with a unique error message. Blank if transaction was successful	<OrderNumbers>	3	1/1	String	0/10	20078
<ContractNumber>	Reserved for future use	<OrderNumbers>	3	1/1	String	0/20	HH832
<OrderSuffix>	Contains order suffix information	<OrderNumbers>	3	1/*	-	-	-
<Suffix>	Ingram Micro order suffix number	Attribute of <OrderSuffix>	A	1/1	Int	2/2	11
<DistributionWeight>	Distribution weight	<OrderSuffix>	4	1/1	String	1/5	45
<SuffixErrorResponse>	Refers to a suffix level error message. Blank if successful	<OrderSuffix>	4	1/1	String	0/100	Invalid bill to suffix
<SuffixErrorType>	Refers to a suffix level error code	Attribute of <SuffixErrorResponse>	A	1/1	String	0/10	20119
<Carrier>	Refers to the name of the carrier	<OrderSuffix>	4	1/1	String	0/2	CityLink
<CarrierCode>	Refers to the carrier code	Attribute of <Carrier>	A	1/1	String	2/2	CN
<LineInformation>	Contains line information	<OrderSuffix>	4	1/*	-	-	-
<ProductLine>	Contains product information	<LineInformation>	5	1/*	-	-	-
<LineError>	Contains line level error message	<ProductLine>	6	1/1	String	0/100	Invalid SKU
<SKU>	Ingram Micro product code	<ProductLine>	6	1/1	String	1/12	943776
<ManufacturerPartNumber>	Manufacturer Part Number	<ProductLine>	6	0/1	String	1/14	65ASDN HB2300256
<UPC>	Universal Product Code (if applicable in IM system)	<ProductLine>	6	0/1	String	1/12	079856395124
<CustomerPartNumber>	Customer Part Number (if applicable in IM system)	<ProductLine>	6	0/1	String	1/8	ABC12345
<UnitPrice>	Price per unit	<ProductLine>	6	1/1	String	1/*	83.65
<IngramLineNumber>	Ingram Micro line number	<ProductLine>	6	1/1	String	3/3	020
<ShipFromBranch>	Stocking branch number	<ProductLine>	6	1/1	Int	2/2	20
<OrderQuantity>	Ordered quantity	<ProductLine>	6	1/1	Int	1/*	30
<AllocatedQuantity>	Quantity allocated to the order	<ProductLine>	6	1/1	Int	1/*	25
<BackOrderedQuantity>	Quantity on backorder	<ProductLine>	6	1/1	Int	1/*	5
<BackOrderETA Date>	ETA date when stock will arrive at Ingram Micro warehouse	<ProductLine>	6	1/1	Int	0/*	03/08/2003
<PriceDerived>	Refers to price code	<ProductLine>	6	1/1	String	1/1	A

<ForeignCurrency>	Foreign currency value (if applicable)	<ProductLine>	6	1/1	String	0/*	77.88
<FreightRate>	Rate of freight	<ProductLine>	6	1/1	String	0/*	12.50
<TransitDays>	Transit calculation	<ProductLine>	6	1/1	String	1/5	1
<BillToSuffix>	Bill to suffix for order	<ProductLine>	6	1/1	String	3/3	200
</ProductLine>	Close of Product Line	<LineInformation>	5	1/1	-	-	-
<CommentLine>	Contains line level comment information	<LineInformation>	5	1/*	-	-	-
<CommentLineNumber>	Comment line number	<CommentLine>	6	1/1	String		002
<CommentText>	Comment text	<CommentLine>	6	1/1	String		Please deliver to the black door
</CommentLine>	Close of comment section	<LineInformation>	5	1/1	-	-	-
</LineInformation>	Close of line section	<OrderSuffix>	4	1/1	-	-	-
</OrderSuffix>	Close of order suffix section	<OrderNumbers>	3	1/1	-	-	-
</OrderNumbers>	Close of order numbers section	<OrderInfo>	2	1/1	-	-	-
</OrderInfo>	Close of order info section	<DtypeOrderResponse>	1	1/1	-	-	-
</DtypeOrderResponse>	Close of message	-	0	1/1	-	-	-

Notes:

This transaction will return an empty <Details> element along with the <TransactionHeader> element if incorrect information is provided.

An error response:

An example of an error message that will be generated if the LoginID, Password or CountryCode are invalid:

```
<TransactionHeader>
<
  <ErrorStatus ErrorNumber="20007">ERROR: LoginID, or Password or CountryCode is
  incorrect</ErrorStatus>
  <DocumentID>{0598CBDE-30B5-497E-9096-CAC5992D4AFD}</DocumentID>
  <TransactionID>789456</TransactionID>
  <TimeStamp>2001-07-16T17:25:58</TimeStamp>
</TransactionHeader>
```

Notes:

If the transaction cannot be completed successfully, <TransactionHeader> is the only element that will be populated and returned.

Advanced Shipment Notice Transaction (ASN - Despatch Advice)

Description of Transaction

The IM-XML ASN transaction (also known as Despatch Advice notification in Europe) returns to our partners information on orders and goods shipped from the IM distribution centers. It contains information relating to shipments including product, quantity, tracking information, serial numbers, Bill To, Ship To and Ship From Addresses.

The transaction is sent to the customer every 15-20 minutes if shipments have occurred within this timeframe. If no shipments were made within the timeframe, no ASN messages will be sent to the customer. Each shipment will produce its own ASN message.

The processing cycle will cease and commence according to the overnight batch processing times. See section on Ingram Micro System Availability for details.

Ingram Micro uses a different IP address for sending requests to partners than we do for receiving requests. This new IP / URL must be registered by the customer's firewall to allow messages to be received from Ingram Micro. Information is available on request from our ECS- Buffalo team.

Sample Document: ASN Transaction

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<DespatchAdvice>
  <DespatchAdviceHeader>
    <DespatchAdviceNumber>40H2YZT11100510</DespatchAdviceNumber>
    <CustomerPO>1424540</CustomerPO>
  </DespatchAdviceHeader>
  <IMAccountNumber>MD4011111</IMAccountNumber>
  <ShipToSuffix>000</ShipToSuffix>
  <DateHeader>
    <Date Type="Document">20100510</Date>
    <Date Type="Despatch">20100421</Date>
    <Date Type="Delivery">20100426</Date>
    <Date Type="Order">20100421</Date>
  </DateHeader>
  <Address Type="ShipFrom">
    <Name>INGRAM MICRO</Name>
    <AddressLine1>12510 MICRO DRIVE</AddressLine1>
    <City>MIRA LOMA</City>
    <State>CA</State>
    <PostalCode>917520000</PostalCode>
  </Address>
  <Address Type="ShipTo">
    <Name>NAVAL HOSPITAL</Name>
    <Attention>ATTN Ms. Smith</Attention>
```

```

<AddressLine1>CODE 33 M82CG65</AddressLine1>
<AddressLine2>2222 N Willow ST</AddressLine2>
<City>Willowville</City>
<State>CA</State>
<PostalCode>902100000</PostalCode>
<CountryCode>US</CountryCode>
</Address>
<ConsignmentHeader>
  <SequenceNumber>1</SequenceNumber>
  <NumberOfPackages>5</NumberOfPackages>
  <CarrierCode>RG</CarrierCode>
  <CarrierName>RPS Ground/FedEx Ground</CarrierName>
  <UniversalScacCode>RPSI</UniversalScacCode>
</ConsignmentHeader>
<MeasurementHeader>
  <UnitOfMeasure>LBS</UnitOfMeasure>
  <Weight>165</Weight>
</MeasurementHeader>
<LineHeader>
  <LineItem LineNumber="1">
    <Product SKU="M35621" DespatchQuantity="1">
      <Item Type="UPC">0808736847162</Item>
      <ManufacturerSKU>Q8754A</ManufacturerSKU>
      <CustomerPartNumber>K1111111</CustomerPartNumber>
      <SKUDescription1>42IN X 200FT UNIVERSAL INSTANT-PAPR</SKUDescription1>
      <SKUDescription2>DRY GLOSS PHOTO PAPER</SKUDescription2>
      <SerialNumberHeader>
        <SerialNumber/>
      </SerialNumberHeader>
    </Product>
    <PackageHeader>
      <IdentificationHeader>
        <Identification TrackingNumber="111111111111"/>
      </IdentificationHeader>
    </PackageHeader>
  </LineItem>
  <LineItem LineNumber="1">
    <Product SKU="M35621" DespatchQuantity="1">
      <Item Type="UPC">0808736847162</Item>
      <ManufacturerSKU>Q8754A</ManufacturerSKU>
      <CustomerPartNumber> K1111111</CustomerPartNumber>
      <SKUDescription1>42IN X 200FT UNIVERSAL INSTANT-PAPR</SKUDescription1>
      <SKUDescription2>DRY GLOSS PHOTO PAPER</SKUDescription2>
      <SerialNumberHeader>
        <SerialNumber/>
      </SerialNumberHeader>
    </Product>
    <PackageHeader>
      <IdentificationHeader>
        <Identification TrackingNumber="222222222222"/>
      </IdentificationHeader>
    </PackageHeader>
  </LineItem>
  <LineItem LineNumber="1">
    <Product SKU="M35621" DespatchQuantity="1">
      <Item Type="UPC">0808736847162</Item>
      <ManufacturerSKU>Q8754A</ManufacturerSKU>
      <CustomerPartNumber> K1111111</CustomerPartNumber>
      <SKUDescription1>42IN X 200FT UNIVERSAL INSTANT-PAPR</SKUDescription1>

```

```

    <SKUDescription2>DRY GLOSS PHOTO PAPER</SKUDescription2>
    <SerialNumberHeader>
      <SerialNumber/>
    </SerialNumberHeader>
  </Product>
  <PackageHeader>
    <IdentificationHeader>
      <Identification TrackingNumber="333333333333"/>
    </IdentificationHeader>
  </PackageHeader>
</LineItem>
<LineItem LineNumber="1">
  <Product SKU="M35621" DespatchQuantity="1">
    <Item Type="UPC">0808736847162</Item>
    <ManufacturerSKU>Q8754A</ManufacturerSKU>
    <CustomerPartNumber> K1111111</CustomerPartNumber>
    <SKUDescription1>42IN X 200FT UNIVERSAL INSTANT-PAPR</SKUDescription1>
    <SKUDescription2>DRY GLOSS PHOTO PAPER</SKUDescription2>
    <SerialNumberHeader>
      <SerialNumber/>
    </SerialNumberHeader>
  </Product>
  <PackageHeader>
    <IdentificationHeader>
      <Identification TrackingNumber="4444444444444444"/>
    </IdentificationHeader>
  </PackageHeader>
</LineItem>
<LineItem LineNumber="1">
  <Product SKU="M35621" DespatchQuantity="1">
    <Item Type="UPC">0808736847162</Item>
    <ManufacturerSKU>Q8754A</ManufacturerSKU>
    <CustomerPartNumber> K1111111</CustomerPartNumber>
    <SKUDescription1>42IN X 200FT UNIVERSAL INSTANT-PAPR</SKUDescription1>
    <SKUDescription2>DRY GLOSS PHOTO PAPER</SKUDescription2>
    <SerialNumberHeader>
      <SerialNumber/>
    </SerialNumberHeader>
  </Product>
  <PackageHeader>
    <IdentificationHeader>
      <Identification TrackingNumber="555555555555"/>
    </IdentificationHeader>
  </PackageHeader>
</LineItem>
</LineHeader>
<TotalLinesShipped>5</TotalLinesShipped>
</DespatchAdvice>

```

Elements/Attributes Description: ASN Transaction

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<DespatchAdvice>	Contains Despatch Advice	-	0	1/1	-	-	-
<DespatchAdviceHeader>	Contains Despatch Advice Header Information	<DespatchAdvice>	1	0/1	-	-	-
<DespatchAdviceNumber>	Despatch Advice Number	<DespatchAdviceHeader>	2	0/1	string	1/35	30D63F421091221
<CustomerPO>	Customer PO Number	<DespatchAdviceHeader>	2	0/1	String	1/35	3XTXXXX1
</DespatchAdviceHeader>	Despatch Advice Header Close	<DespatchAdvice>	1	-	-	-	-
<IMAccountNumber>	Ingram Micro Account Number	<DespatchAdvice>	1	0/*	String	0/11	MD30036215
<ShipToSuffix>	Some partners have frequent shipTo destinations set up with Ingram under a ShipTo ID# (ShipToSuffix). These shipTo suffixes are specified instead of the shipTo Address at order entry and can be supplied on the ASN.	<DespatchAdvice>	1	1/1	String	3/3	000
<DateHeader>	Header Date Information	<DespatchAdvice>	1	0/1	-	-	-
<Date>	Contains Date Information	<Date Header>	2	1/*	String	0/*	20030718
<Type>	Refers to the Document Date	Attribute of <Date>	A	1/*	String	1/35	Document
<Date>	Contains Date Information	<Date Header>	2	1/*	String	0/*	20030718
<Type>	Refers to the Despatch date	Attribute of <Date>	A	1/*	String	1/35	Despatch
<Date>	Contains Date Information	<Date Header>	2	1/*	String	0/*	20030717
<Type>	Refers to the Delivery Date	Attribute of <Date>	A	1/*	String	1/35	Delivery
<Date>	Contains Date Information	<Date Header>	2	1/*	String	0/*	20030717
<Type>	Refers to the Order Date	Attribute of <Date>	A	1/*	String	1/35	Order
</DateHeader>	Date Header Close	<DespatchAdvice>	1	-	-	0/1	-
<Address>	Contains Address Information	<DespatchAdvice>	1	0/*	-	-	-
<Type>	Refers to Address Type	Attribute of <Date>	A	0/*	String	1/35	ShipFrom
<Name>	Contains Ship From Name	<Address>	2	0/1	String	1/35	Ingram Micro (Jonestown)
<AddressLine1>	Ship From Address Line1	<Address>	2	0/1	String	0/35	80 Micro Drive
<AddressLine2>	Ship From Address	<Address>	2	0/1	String	0/35	SHPCR ADDR2

	Line2						
<AddressLine3>	Ship From Address Line3	<Address>	2	0/1	String	0/35	SHPFR ADDR3
<AddressLine4>	Ship From Address Line4	<Address>	2	0/1	String	0/35	SHPFR ADDR4
<City>	Ship From City	<Address>	2	0/1	String	1/35	Jonestown
<State>	Ship From State or Province	<Address>	2	0/1	String	2/2	NY
<PostalCode>	Ship From Postal Code	<Address>	2	0/1	String	1/9	11111111
</Address>	Address Close	<DespatchAdvice>	1	-	-	-	-
<Address>	Contains Address information	<DespatchAdvice>	1	1/*	-	-	-
<Type>	Refers to Address Type	Attribute of <Date>	A	0/*	String	1/35	ShipTo
<Name>	Contains Ship To Name	<Address>	2	0/1	String	1/35	ABC Company
<Attention>	Contains Attention of Name	<Address>	2	0/1	String	1/35	Bill Smith
<AddressLine1>	Ship To Address Line1	<Address>	2	0/1	String	0/35	640 Elm Street
<AddressLine2>	Ship To Address Line2	<Address>	2	0/1	String	0/35	
<AddressLine3>	Ship To Address Line3	<Address>	2	0/1	String	0/35	
<AddressLine4>	Ship To Address Line4	<Address>	2	0/1	String	0/35	
<City>	Ship To City	<Address>	2	0/1	String	1/35	Bangor
<State>	Ship To State or Province	<Address>	2	0/1	String	2/2	NY
<PostalCode>	Ship To Postal Code	<Address>	2	0/1	String	1/9	11111111
<CountryCode>	Ship To Country Code	<Address>	2	0/1	String	2/2	US
</Address>	Address Close	<DespatchAdvices >	1	-	-	-	-
<ConsignmentHeader>	Contains Consignment information	<DespatchAdvices >	1	1/1	-	-	-
<SequenceNumber>	Sequence Number	<ConsignmentHeader>	2	1/1	String	1/12	1
<NumberOfPackages>	Number of packages in shipment	<ConsignmentHeader>	2	1/1	Number	1/8	6
<CarrierCode>	2 digit IM Carrier Code	<ConsignmentHeader>	2	0/1	String	0/2	RG
<CarrierName>	IM Carrier Description	<ConsignmentHeader>	2	0/1	String	0/50	RPS Ground/FedEx Ground
<UniversalScacCode>	Standard Carrier Alpha Code from Ingram's Database.	<ConsignmentHeader>	2	0/1	String	0/4	RPSI
</ConsignmentHeader>	Consignment Header Close	<DespatchAdvices >	1	-	-	-	-
<MeasurementHeader>	Contains Measurement Information	<DespatchAdvices >	1	1/1	-	-	-
<UnitOfMeasure>	Unit of Measure	<MeasurementHeader>	2	1/1	Text Only	1/3	LBS

<Weight>	Weight of Package	<MeasurementHeader>	2	1/1	String	1/18	21
</MeasurementHeader>	Measurement Header Close	<DespatchAdvices>	1	-	-	-	-
<LineHeader>	Contains Line Header Information	<DespatchAdvices>	1	1/1	-	-	-
<LineItem>	Contains Line Item Information	<LineHeader>	2	0/*	-	-	-
<LineNumber>	IM Line Number	Attribute of <LineItem>	A	0/*	String	1/6	1
<Product>	Contains Product Information	<LineItem>	3	1/1	-	-	-
<SKU>	Product SKU	Attribute of <Product>	A	1/1	string	1/35	123512
<DespatchQuantity>	Quantity Despatched	Attribute of <Product>	A	1/1	string	1/6	3
<Item>	Line Item :This is the UPC in North America	<Product>	4	1/*	String	-	0883436025317
<Type>	Line Code Type	Attribute of <Item>	A	1/1	String	1/35	UPC
<ManufacturerSKU>	Manufacturer Part ID Number	<Product>	4	0/*	String	1/35	Q8754A
<CustomerPartNumber>	This is the Reseller's PartNumber ID, when provided via Order Entry (Ex: EDI 850) or when cross reference exists within Ingram's system. Note: Where a cross reference is set up in Ingram's system and multiple CustomerPartNumbers are found for a given Ingram Micro SKU, the CustomerPartNumber of the first record found will be provided.	<Product>	4	0/*	String	0/8	12345678
<SKUDescription1>	Product SKU Description	<Product>	4	1/1	String	1/35	2GB DUAL RANK PC3-10600 1333MHZMEM
<SKUDescription2>	Product SKU Description	<Product>	4	1/1	String	1/35	DDR3 RDIMM ECC CL9 VLP
<SerialNumberHeader>	Contains Serial Number Information	<Product>	4	0/1	-	-	-
<SerialNumber>	Product Serial Number. At the account level, partners must be flagged for serial number capture. Please contact your Sales Representative. Note: Not all	<SerialNumberHeader>	5	0/*	String	0/35	S1234567

	products are serialized.						
</SerialNumberHeader>	Serial Number Header Close	<Product>	4	-	-	-	-
</Product>	Product Close	<LineItem	3	-	-	-	-
<PackageHeader>	Contains Package Information	<DespatchAdvices>	3	1/1	-	-	-
<IdentificationHeader>	Contains Package Identification Information	<PackageHeader>	4	1/1	-	-	-
<Identification>	Contains Identification Information	<IdentificationHeader>	5	1/*	-	-	-
<TrackingNumber>	Carrier Tracking Number	Attribute of <Identification>	A	1/1	String	1/35	0144444444444444
</IdentificationHeader>	Identification Header Close	<PackageHeader>	4	-	-	-	-
</PackageHeader>	Package Header Close	<DespatchAdvices>	3	-	-	-	-
</LineItem>	LineItem Close	<LineHeader>	2	-	-	-	-
</LineHeader>	Line Header Close	<DespatchAdvices>	1	-	-	-	-
<TotalLinesShipped>	Total Number of Lines Shipped	<DespatchAdvices>	1	1/1			3
</DespatchAdvice>	Despatch Advice Close	-	0	-	-	-	-

For the IM-XML ASN transaction we are not expecting a formal acknowledgement message. Instead, an HTTP level confirmation from a partner's environment confirms that messages have been successfully posted.

Invoice Transaction

Description of Transaction

The IM-XML Invoice transaction returns financial information on invoiced orders. It contains general information that appears on standard invoices. The IM-XML Version 1.0 Invoice is not approved by any governing body as a legal electronic copy of an invoice. It is based on the Ingram Micro X12 EDI format of a standard invoice. We recommend that the paper invoice is still retained for legal purposes.

One XML invoice will be sent for each IM order invoice. The purpose of the IM-XML Invoice transaction is to provide detailed financial information in the areas of product charges, tax charges and miscellaneous charges so that this invoicing information can be utilized / processed within a partner's order and invoice management system.

Ingram Micro uses a different IP address for sending requests to partners than we do for receiving requests. This new IP / URL must be registered by the customer's firewall to allow messages to be received from Ingram Micro. Additional information is available on request from our ECS-Buffalo team.

PLEASE NOTE: There is an approval process in place for partners wishing to receive IMXML Invoices. In addition, the IMXML Invoice transaction demands increased Ingram Micro resource attention for set up, so partners that are approved will be placed into a queue to be set up. Please contact your Ingram Micro Sales Representative to request being added to the queue. Once in the queue you will be contacted with an Ingram set up completion date.

Sample Document: Invoice Transaction

```
<Invoice>
<InvoiceHeader>
<InvoiceType>Invoice</InvoiceType>
<InvoiceNumber>202540088</InvoiceNumber>
<InvoiceDate>20040217</InvoiceDate>
<CustomerPO>CST400222</CustomerPO>
<OriginalOrderNumber>205544811</OriginalOrderNumber>
</InvoiceHeader>
<IMAccountNumber>20451887000</IMAccountNumber>
<Address Type="Customer">
<Name>BIODIRECT</Name>
<Attention>GORDON GREEN</Attention>=
<AddressLine1>CELWAY INDUSTRIAL ESTATE</AddressLine1>
<AddressLine2>Unit 34</AddressLine2>
<City>Santa Anna</City>
<PostalCode>34242</PostalCode>
<CountryCode>US</CountryCode>
</Address>
<Address Type="ShipTo">
<Name>LOWCOST IT</Name>
<Attention>PURCHASING MANAGER</Attention>
<AddressLine1>123 Main Street</AddressLine1>
<AddressLine2>COMMON SQUARE</AddressLine2>
<City>Santa Anna</City>
<PostalCode>34224</PostalCode>
<CountryCode>US</CountryCode>
</Address>
<Address Type="ShipFrom">
<Name>INGRAM MICRO TLP MEMPHIS</Name>
<AddressLine1>3820 MICRO DRIVE</AddressLine1>
<City>Millington</City>
<PostalCode>380530000</PostalCode>
</Address>
<VAT>
<VATNumber>UK445522668</VATNumber>
</VAT>
<Currency>
<CurrencyCode>GBP</CurrencyCode>
</Currency>
<PaymentTerms>
<TermsCode>66</TermsCode>
</PaymentTerms>
<PaymentDue>
<PaymentDueDate>20040231</PaymentDueDate>
</PaymentDue>
<LineItemHeader>
<LineItem LineNumber="1">
<Product SKU="P803551" InvoicedQuantity="3">
<CustomerSKU></CustomerSKU>
<EANCode>1234567891230</EANCode>
<ManufacturerSKU>VEHH887A6</ManufacturerSKU>
<SKUDescription1>INTEGRATED CD ROM</SKUDescription1>
<SKUDescription2>2X RW/4X DVD</SKUDescription2>
</Product>
<SerialNumberHeader>
<SerialNumber>SE445262</SerialNumber>
```

```

<SerialNumber>SE445263</SerialNumber>
<SerialNumber>SE445264</SerialNumber>
<SerialNumberHeader>
<Tax Type="VAT">20.02</Tax>
<LineMonetaryInfo>
<UnitPrice>32.11</UnitPrice>
<LineItemAmount>96.33</LineItemAmount>
</LineMonetaryInfo>
</LineItem>
</LineItemHeader>
<TotalInformation Type="OrderLines">1</TotalInformation>
<TotalInformation Type="TotalQuantity">3</TotalInformation>
<TotalInformation Type="Terms">100 NET 15 DAYS</TotalInformation>
<TotalFinancial Type="TotalAmountDue">136.35</TotalFinancial>
<TotalFinancial Type="TotalLineItemAmount">96.33</TotalFinancial>
<TotalFinancial Type="TotalDiscountAmount">0</TotalFinancial>
<TotalFinancial Type="TotalTaxableAmount">116.33</TotalFinancial>
<Final Type="FinalTaxAmount">20.02</Final>
<Final Type="FinalTaxableAmount">96.33</Final>
</Invoice>

```

Elements/Attributes Description: Invoice Transaction

Element	Description	Parent Element	NL	Min/Max Occurrences	Data Type	Min/Max Length	Example Data
<Invoice>	Contains Invoice	-	0	1/1	-	-	-
<InvoiceHeader>	Contains Invoice Header Information	<Invoice>	1	1/1	-	-	-
<InvoiceType>	Contains Invoice Type	<InvoiceHeader>	2	1/1	String	1/35	Invoice
<InvoiceNumber>	Invoice Number	<InvoiceHeader>	2	1/1	String	1/35	INVOICE NBR
<InvoiceDate>	Contains Invoice Date	<InvoiceHeader>	2	1/1	String	1/35	20030717
<CustomerPO>	Customer PO Number	<InvoiceHeader>	2	1/1	String	1/35	CUST PO
<OriginalOrderNumber>	Original order number	<InvoiceHeader>	2	0/1	String	1/35	20123451 1
</InvoiceHeader>	Invoice Header Close	< InvoiceHeader>	1	-	-	-	-
<IMAccountNumber>	Ingram Micro Account Number	< InvoiceHeader>	1	1/*	String	0/11	CUST NUMBER
<Address>	Contains Address Information	<Invoice>	2	1/*	-	-	-
<Type>	Refers to the Address Type	Attribute of <Address>	A	1/1	String	1/35	Customer
<Name>	Contains Bill To	<Address>	2	0/1	String	1/35	BILLTO NAME

	Name						
<Attention>	Bill To Attention Name	<Address>	2	0/1	String	1/35	BILLTO ATTN
<AddressLine1>	Bill To Address Line1	<Address>	2	0/1	String	0/35	BILLTO ADDR1
<AddressLine2>	Bill To Address Line2	<Address>	2	0/1	String	0/35	BILLTO ADDR2
<AddressLine3>	Bill To Address Line3	<Address>	2	0/1	String	0/35	BILLTO ADDR3
<AddressLine4>	Bill To Address Line4	<Address>	2	0/1	String	0/35	BILLTO ADDR4
<City>	Bill To City	<Address>	2	0/1	String	1/35	BILLTO CITY
<PostalCode>	Bill To Postal Code	<Address>	2	0/1	String	1/9	BT POSTCD
<CountryCode>	Bill To Country Code	<Address>	2	0/1	String	1/3	DE
</Address>	Address Close	<Invoice>	1	-	-	-	-
<Address>	Contains Address Information	<Invoice>	2	0/*	-	-	-
<Type>	Refers to the Address Type	Attribute of <Address>	A	1/1	String	1/35	Ship To
<Name>	Contains Ship To Name	<Address>	2	0/1	String	1/35	SHPTO NAME
<AddressLine1>	Ship To Address Line1	<Address>	2	0/1	String	0/35	SHPTO ADDR1
<AddressLine2>	Ship To Address Line2	<Address>	2	0/1	String	0/35	SHPTO ADDR2
<AddressLine3>	Ship To Address Line3	<Address>	2	0/1	String	0/35	SHPTO ADDR3
<AddressLine4>	Ship To Address Line4	<Address>	2	0/1	String	0/35	SHPTO ADDR4
<City>	Ship To City	<Address>	2	0/1	String	1/35	SHPTO City
<PostalCode>	Ship To Postal Code	<Address>	2	0/1	String	1/9	STPOSTCD
<CountryCode>	Ship To Country Code	<Address>	2	0/1	String	1/3	UK
</Address>	Address Close	<Invoice>	1	-	-	-	-
<Address>	Contains Address Information	<Invoice>	2	0/*	-	-	-
<Type>	Refers to Address Type	Attribute of <Date>	A	0/1	String	1/35	ShipFrom
<Name>	Contains Ship From Attention Name	<Address>	2	0/1	String	1/35	SHPFR NAME
<Attention>	Contains Attention of Name	<Address>	2	0/1	String	1/35	SHPFR ATTN
<AddressLine1>	Ship From Address Line1	<Address>	2	0/1	String	0/35	SHPFR ADDR1
<AddressLine2>	Ship From Address Line2	<Address>	2	0/1	String	0/35	SHPFR ADDR2
<AddressLine3>	Ship From Address Line3	<Address>	2	0/1	String	0/35	SHPFR ADDR3
<AddressLine4>	Ship From Address Line4	<Address>	2	0/1	String	0/35	SHPFR ADDR4
<City>	Ship From City	<Address>	2	0/1	String	1/35	SHPFR CITY
<PostalCode>	Ship From Postal Code	<Address>	2	0/1	String	1/9	34242
<CountryCode>	Ship From	<Address>	2	0/1	String	1/3	FR

	Country Code						
</Address>	Address Close	<Invoice>	1	-	-	-	-
<VAT>	Contains VAT information	<Invoice>	1	1/1	-	-	-
<VATNumber>	VAT Number	<VAT>	2	1/1	string	1/35	VAT REG NBR
</VAT>	VAT Close	<Invoice>	1	-	-	-	-
<Currency>	Contains Currency Information	<Invoice>	1	1/1	-	-	-
<CurrencyCode>	Contains Currency Code	<Currency>	2	1/1	String	1/3	CA, US
</Currency>	Currency Close	<Invoice>	1	-	-	-	-
<PaymentTerms>	Contains Payment Terms Information	<Invoice>	1	1/1	-	-	-
<TermsCode>	Contains Ingram Micro payment terms code	<PaymentTerms>	2	1/1	String	1/3	66
</PaymentTerms>	Payment Terms Close	<Invoice>	1	-	-	-	-
<PaymentDue>	Contains Due Information	<Invoice>	1	1/1	-	-	-
<PaymentDueDate>	Contains Payment Due Date	<PaymentTerms>	2	1/1	String	1/35	20030831
</PaymentDue>	Payment Due Close	<Invoice>	1	-	-	-	-
<LineItemHeader>	Contains Line Item Header Information	<Invoice>	1	1/1	-	-	-
<LineItem>	Contains Line Item Information	<LineItemHeader>	2	1/*	-	-	-
<LineNumber>	Line number. Will return customer line number if present on IMPulse	Attribute of <LineItem>	A	1/1	string	1/6	1
<Product>	Contains Product Information	<LineItem>	3	1/1	-	-	-
<SKU>	Product SKU	Attribute of <Product>	A	1/1	string	1/35	Part1
<InvoicedQuantity>	Quantity Invoiced	Attribute of <Product>	A	1/1	string	1/3	3
<CustomerSKU>	Customer SKU	<Product>	4	1/1	String	1/35	CUST PART1
<EANCode>	EAN Code	<Product>	4	0/1	String	1/35	EAN CODE1
<ManufacturerSKU>	Manufacturers SKU	<Product>	4	0/1	String	1/35	VEND PART1
<SKUDescription1>	Product SKU Description	<Product>	4	1/1	string	1/35	DESC LINE 1
<SKUDescription2>	Product SKU Description	<Product>	4	1/1	string	1/35	DESC LINE 2
</Product>	Product Close	<LineItem>	3	-	-	-	-
<SerialNumberHeader>	Contains Serial Number Information	<Product>	3	0/1	-	-	-

<SerialNumber>	Product Serial Number	<SerialNumberHeader>	4	1/*	String	0/35	SERIAL NBR1
</SerialNumberHeader>	Serial Number Header Close	<Product>	3	-	-	-	-
<LineMonetaryInfo>	Contains Line Monetary Information	<LineItem>	3	1/1	-	-	-
<UnitPrice>	Unit Price	<LineMonetaryInfo>	4	1/1	Number	1/18	32.11
<LineItemAmount>	Total Line Amount	<LineMonetaryInfo>	4	1/1	Number	1/18	96.33
</LineMonetaryInfo>	Line Monetary Info Close	<LineItem>	3	0/1	-	-	-
</LineItem>	LineItem Close	<LineHeader>	2	-	-	-	-
</LineItemHeader>	Line Item Header Close	<Invoice>	1	-	-	-	-
<TotalInformation>	Contains Total Information	<Invoice>	1	1/1	Number	1/10	1
Type	Refers to Order Lines	Attribute of <TotalInformation>	A	1/1	String	1/35	OrderLine
<TotalInformation>	Contains Total Information	<Invoice>	1	1/1	Number	1/10	3
Type	Refers to Quantity Type	Attribute of <TotalInformation>	A	1/1	String	1/35	TotalQuantity
<TotalInformation>	Contains Total Information	<Invoice>	1	1/1	String	1/35	100 Net 15 Days
Type	Refers to Terms Type	Attribute of <TotalInformation>	A	1/1	String	1/35	Terms
<TotalFinancial>	Contains Total Financial Information	<Invoice>	1	1/1	Number	1/18	136.35
Type	Refers to Total Amount Due Type	Attribute of <TotalFinancial>	A	1/1	String	1/35	TotalAmountDue
<TotalFinancial>	Contains Total Financial Information	<Invoice>	1	1/1	Number	1/18	96.33
Type	Refers to Total Line Item Amount	Attribute of <TotalFinancial>	A	1/1	String	1/35	TotalLineItemAmount: subtotal without the tax or handling fee included.
<TotalFinancial>	Contains Total Financial Information	<Invoice>	1	1/1	Number	1/18	0
Type	Refers to TotalDiscount Amount	Attribute of <TotalFinancial>	A	1/1	String	19	TotalDiscountAmount

<TotalFinancial>	Contains Total Financial Information	<Invoice>	1	1/1	Number	1/18	116.33
Type	Refers to Total Taxable Amount	Attribute of <TotalFinancial>	A	1/1	String	1/35	TotalTaxableAmount: total line item amount on the associated order including the handling fee charge
<Final>	Contains Final Values	<Invoice>	1	1/1	Number	1/18	20.02
Type	Refers to Final Tax Amount	Attribute of <Final>	A	1/1	String	14	FinalTaxAmount
<Final>	Contains Final Values	<Invoice>	1	1/1	Number	1/18	96.33
Type	Refers to Final Taxable Amount	Attribute of <Final>	A	1/1	String	1/35	FinalTaxableAmount
</Invoice>	Invoice Close	-	0	-	-	-	-

For the IM-XML Invoice transaction we are not expecting a formal acknowledgement message. Instead, an HTTP level confirmation from a partner's environment confirms that messages have been successfully posted.

BaseRate Transaction

Description of Transaction

This request comes from customers to Ingram Micro and is a real-time transaction that allows for querying of base rate shipping information for an order. The order must have been finalized before data can be requested. A sorted list of carrier code, freight rate, and transit information specific to an order distribution is returned to help you select the most appropriate shipping option for your order before the order is released.

If in the inbound document the suffix is left blank the result will be consolidated based on different suffix results.

Inbound XML Document

Root element Name : BaseRateRequest'

Sample Document:

```
<BaseRateRequest>
<Version1.0></Version1.0>
<TransactionHeader>
  <CountryCode>FT</CountryCode>
  <LoginID>CUSTOMER ID</LoginID>
  <Password>CUSTOMER PASSWORD</Password>
  <TransactionID>TESTAIC12356</TransactionID>
</TransactionHeader>
<BaseRateInformation>
  <BranchOrderNumber>4066000</BranchOrderNumber>
  <PostalCode>L5R1V4</PostalCode>
  <Suffix />
</BaseRateInformation>
</BaseRateRequest>
```

Elements/Attributes Description:

Item	Description	Required	Data Type	Min/Max Occurrences	Min/Max Length	Example
BaseRateInformation	Refers to the BaseRate information.	No	Elements only	0/*	-	-
BranchOrderNumber	Order Number plus the branch number	Yes	Characters	-	7/7	4066000
PostalCode	Valid postal code or zip code	Yes	Characters	-	0/9	L5R4A1
Suffix	Suffix of the order	No	Characters	-	2/2	11

Notes:

Documentation Revised : 06/15/10

At any time you have questions in regards to the IM-XML program please contact our ECS-Buffalo team at 1-800-616-4665 or electronically at electronic.services@ingrammicro.com

Sample Document:

```

<BaseRate>
<Carrier CarrierCode="PI" CarrierName="PUROLATOR GROUND">
  <EstimatedFreightCharge>4.87</EstimatedFreightCharge>
  <DaysInTransit>1</DaysInTransit>
</Carrier>
<Carrier CarrierCode="UG" CarrierName="UPS GROUND">
  <EstimatedFreightCharge>5.12</EstimatedFreightCharge>
  <DaysInTransit>1</DaysInTransit>
</Carrier>
</BaseRate>

```

Elements/Attributes Description:

Item	Description	Required	Data Type	Min/Max Occurrences	Min./Max Length	Example
BaseRateInformation	Refers to the BaseRate information.	No	Elements only	0/*	-	-
Suffix	Contains the suffix number	No	Characters	0/1	2/2	11
Carrier	Refers to Carrier informatio .	No	Elements only	1/*	-	-
CarrierCode	Contains Carrier code.	Yes	Characters	1/1	0/2	PI
CarrierName	Contains Carrier name	Yes	Characters	1/1	0/20	PUROLATOR GROUND
EstimatedFreightCharge	Contains the freight charge for the carrier code.	Yes	Characters	1/1	0/12	5.61
DaysInTransit	Refers to each Best seller SKU and its information.	Yes	Characters	1/1	1/7	2

An error response:

Here is an example of an error message that will be generated (ex:) in case Login parameters are invalid:

```

<TransactionHeader>
  <
    <ErrorStatus ErrorNumber="20007">ERROR: LoginID, or Password or CountryCode is incorrect</ErrorStatus>
    <
      <DocumentID>{0598CBDE-30B5-497E-9096-CAC5992D4AFD}</DocumentID>
      <TransactionID>789456</TransactionID>
      <TimeStamp>2001-07-16T17:25:58</TimeStamp>
    </TransactionHeader>

```

Notes:

In case transaction cannot complete successfully <TransactionHeader> is the only element that will be populated and sent back to the client.

RMA Submittal Request Transaction

Description of Transaction

The RMA Submittal Request is a transaction that submits detailed information on particular products to the account's personal Sales Representative for a Return on Merchandise. By submitting this RMA, the request will automatically be emailed to the Sales Representative who handles the particular account. This will be used for customers wishing a credit to their account due to some type of error associated with the packages of products they have received. (ex. Defective items, Damaged items, etc)

Inbound XML Document

Root element Name: "RMASubmittalRequest"

Sample Document:

```
<ContactInformation>
  <EmailAddress>john.smith@domain.com</EmailAddress>
  <PhoneNumber>5555555555</PhoneNumber>
  <Extension>5555</Extension>
  <FirstName>John</FirstName>
  <LastName>Smith</LastName>
</ContactInformation>
<RMASubmit>
  <BranchOrderNumber>4012345</BranchOrderNumber>
  <OrderSuffix>11</OrderSuffix>
  <CustomerPO>PO-12345</CustomerPO>
  <RMALine>
    <SKU>789456</SKU>
    <Quantity>2</Quantity>
    <ReasonForReturn>Defective</ReasonForReturn>
  </RMALine>
  <RMALine>
    <SKU>123987</SKU>
    <Quantity>1</Quantity>
    <ReasonForReturn>Damaged</ReasonForReturn>
  </RMALine>
</RMASubmit>
```

Elements/Attributes Description:

Item	Description	Required	Data Type	Min/Max Occurrences	Min/Max Length	Example
EmailAddress	Refers to the email address of the person who is submitting the Quote Request. This is the email address that will be used by the Sales Representative so they can get in contact with the	Yes	Alpha-Numeric	1/1	1/35	John.smith@domain.com

	person who is submitting the Quote Request.					
PhoneNumber	Refers to the telephone Number of the person submitting the Quote Request. This is the number in which the Sales Representative can use to get a hold of that person.	Yes	Numeric	1/1	1/15	5555555555
Extension	Refers to the Extension (optional) of the Phone Number from the person submitting the Quote Request. This is associated with the telephone number the Sales Representative can use to get in contact with.	No	Numeric	1/1	1/10	55555
FirstName	Refers to the First Name of the person who is submitting the Quote Request	Yes	Alpha-Numeric	1/1	1/30	John
LastName	Refers to the Last Name of the person who is submitting the Quote Request	Yes	Alpha-Numeric	1/1	1/30	Smith
RMASubmit	Refers to the element containing all the information for the submittal of return	Yes		1/1		
BranchOrderNumber	Refers to the original Order in which the product the person is trying to return was purchased on. The first 2 characters of the BranchOrderNumber identifies the Branch in which the order is coming from. The remaining characters (Order Number) are assigned by Ingram.	Yes	Alpha-Numeric	1/1	1/7	4012345
OrderSuffix	Refers to the suffix in which the original order was shipped. This number identifies which shipment came from which Ingram distribution branch.	Yes	Numeric	1/1	1/2	11
CustomerPO	Refers to the reference number off of the original Order. The CustomerPO is a reference for our Customers to track and define which order they have concerns with	Yes	Alpha-Numeric	1/1	1/30	PO-12345
RMALine	Refers to the product information for this order they want to return	Yes		1/many		

SKU	Refers to the product the customer wants to return. This product must be off of the original order, therefore this product must have been purchased from Ingram.	Yes	Alpha-Numeric	1/1	1/12	123456
Quantity	Refers to the quantitative amount of product (the total quantity) the customer would like to return.	Yes	Numeric	1/1	1/5	3
ReasonForReturn	Refers to the specific reason stating why the product is being returned.	Yes	Alpha-Numeric	1/1	1/1024	Damaged

Notes:

The RMA Submittal request must contain items that have been previously ordered through Ingram off of the Branch Order Number they provide. This means that when an order has been fulfilled and shipped to the customer, but there were damaged items within the shipment, the customer is allowed to return these items using the RMA Submittal Request. When submitting the document, they MUST reference the same BranchOrderNumber and OrderSuffix and CustomerPO with the products they are returning with the original order that was sent. That means that the items must come from this order and not from another order that they received. It has to be from the original order or the document will fail. In addition, if the customer orders 5 of item “12345” off of order 4012345, and they want to now return 7 “12345” from order 4012345, this will fail. One can only return up to the maximum quantity ordered. This means that if they had originally ordered 7 items, they can ONLY return up to the maximum of 7 items from this order. Otherwise, the document will fail.

Outbound XML Document

Root element Name : “RMASubmittalResponse”

Sample Document:

-

Elements/Attributes Description:

See TransactionHeader element description.

Notes:

Since this transaction doesn't return anything except for the Transaction Header please see the TransactionHeader element description for information pertaining to the elements seen above.

An error response:

Here is an example of an error response that will be generated if the email address is not properly formatted.

```
<RMASubmittalResponse>
<TransactionHeader>
<ErrorStatus ErrorNumber="20017">ERROR: Email Address format is incorrect. Format should be
Name@SomeDomain.TLD </ErrorStatus>
<DocumentID>{03ECA1AF-C05A-4F9C-A5C4-E2DOCEBE7440}</DocumentID>
  <TransactionID>789456</TransactionID>
  <TimeStamp>2001-07-03T14:42:52</TimeStamp>
</TransactionHeader>
</RMASubmittalResponse>
```

Notes: The email address supplied must be formatted to the proper email address convention. That means that the “@” symbol must be supplied, not in the beginning or not at the end, or not after or before the “.” Otherwise an error will be generated.

Here is an example of an error response that will be generated if the SKU the customer is trying to return does not exist on the original order they purchased.

```
<RMASubmittalResponse>
<TransactionHeader>
<ErrorStatus ErrorNumber="20037">ERROR: The SKU you are returning does not exist in the
original order</ErrorStatus>
<DocumentID>{03ECA1AF-C05A-4F9C-A5C4-E2DOCEBE7440}</DocumentID>
  <TransactionID>789456</TransactionID>
  <TimeStamp>2001-07-03T14:42:52</TimeStamp>
</TransactionHeader>
</RMASubmittalResponse>
```

Notes: The SKU they are returning from the specific BranchOrderNumber/ OrderSuffix/ CustomerPO must exist (purchased) on this specific order for this transaction to succeed.

Here is an example of an error response that will be generated if the Quantity they are trying to return is greater than the quantity they have ordered off of the specific order for a particular SKU.

```
<RMASubmittalResponse>
<TransactionHeader>
<ErrorStatus ErrorNumber="20036"> ERROR: The quantity you are returning is greater than the
quantity you have originally ordered or you have an invalid character specified within the
quantity </ErrorStatus>
<DocumentID>{03ECA1AF-C05A-4F9C-A5C4-E2DOCEBE7440}</DocumentID>
  <TransactionID>789456</TransactionID>
  <TimeStamp>2001-07-03T14:42:52</TimeStamp>
</TransactionHeader>
</RMASubmittalResponse>
```

Notes: The Quantity the customer wants to return must not be greater than the quantity they have originally ordered for the particular item. The transaction will generate an error if this occurs

Ingram Micro System Availability

This is a schedule of the Ingram Micro mainframe availability. IMXML's real-time xml system will not be available during mainframe downtime. You could still send orders using Asynchronous Order Request v2.5 and your orders could be entered when our system becomes available.

INGRAM MICRO'S MAINFRAME SYSTEM AVAILABILITY, MONDAY - SUNDAY.

ALL TIMES ARE P.S.T. (US).

THE BELOW SCHEDULE IS FOR A NORMAL WEEKEND.

REGION	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
USA	04:00-00:00	04:00-00:00	04:00-00:00	04:00-00:00	04:00-00:00	05:00-20:00	05:00-15:00
CANADA	04:00-23:00	04:00-23:00	04:00-23:00	04:00-23:00	04:00-23:00	05:00-18:00	05:00-15:00

INGRAM MICRO'S MAINFRAME SYSTEM AVAILABILITY, MONDAY - SUNDAY.

ALL TIMES ARE P.S.T. (US).

THE BELOW SCHEDULE IS FOR A MONTHEND WEEKEND.

xx:xx-xx:xx defines the region as being unavailable for that time period.

REGION	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
USA	04:00-00:00	04:00-00:00	04:00-00:00	04:00-00:00	04:00-00:00	05:00-20:00	xx:xx-xx:xx
CANADA	04:00-23:00	04:00-23:00	04:00-23:00	04:00-23:00	04:00-23:00	05:00-18:00	xx:xx-xx:xx