White Paper

Divisional Processing

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Sterling Commerce
An IBM Company

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Purpose

This document will discuss some common scenarios for divisional processing for both inbound ANSI X12 and EDIFACT data. Additionally, it will discuss implementation practices for both standard and pass-through data processing used in combination with divisional processing.

Background

Many GENTRAN:Server for Windows users have trading partners with multiple divisions from a single corporation. The different trading partner divisions may use the same interchange level sender identifier but use different group level sender identifiers in the EDI data. To enable proper recognition of inbound data, users will typically be required to set up a separate partner for each division in the partner editor. Each divisional partner will have it own unique EDI Code in the partner definition.

A variation of the implementation need described above is when a user is a member of a company that merged with another company. The two merged companies desire to conduct EDI trading with the same external trading partner but want to continue to be recognized as separate trading partners to the single external trading partner. The external trading partner will send EDI data that has the same sender identifier for both of the merged trading partners but uses different receiver identifierss (at the interchange level, group level, or both). Users will typically be required to set up two partners in the Partner Editor (one for each merged partner) to enable proper recognition of inbound EDI data. Each merged partner will have its own unique EDI Code in the Partner Definition.

Both scenarios described above (known as divisional processing) may require the use of special break maps provided to users on the installation CD. The special break maps will enable successful recognition between the sender/receiver identifiers within the inbound EDI data and the unique EDI Code in the Partner Definition. This paper will summarize the recommended break maps that should be registered and used for a variety of implementation scenarios.

Break Process

GENTRAN:Server for Windows users should understand the inbound EDI break process flow in order to select the proper break maps for various implementation needs.

The general break process flow and hierarchy is described below:

- The interchange level (ISA for ANSI X12 data or UNB for EDIFACT data) break map runs first and performs the lookup based of the field that contains the Partner Select Standard Rule and looks for a match with the EDI Code identified in the Partner Definition.

- For ANSI X12, regardless of whether or not a match is found at the interchange level, the group level (GS) break map will run and the Partner Select Standard Rule at the group level looks for a match with the EDI Code identified in the Partner Definition. **The standard UNG Break map (UNGBrk.map) for EDIFACT does not have a Partner Select Standard Rule, so the identifier found at the Interchange level will be used.*

- If the group level break map does find a partner match that is the partner used to process the inbound data. The match found at the group level will take priority over a match found at the interchange level.

- If the group level break map does **not** find a match, then the match found by the interchange level break map is used to determine the partner.

- If the interchange or group level break maps do **not** find a match, then the document is flagged as “Partner Unknown”.

**Note: Registration of break maps will have a global impact on inbound EDI data processing in the translator.*

Registration of ISA, GS, or ST break maps will impact all partners with ANSI X12 inbound relationships. Registration of UNB, UNG, or UNH break maps will impact all partners with EDIFACT inbound relationships.

Some users may require pass thru processing in combination with divisional processing. Pass thru processing is where the Header envelope segments in the inbound EDI data are passed through the break maps and used in export maps, turnaround maps, or print forms. Users requiring pass thru processing will need to ensure that the appropriate envelope header segments are added to export maps, turnaround maps, or print forms in addition to selecting the correct break maps that enable both pass thru and divisional processing.

Header envelope segments for ANSI X12 or EDIFACT data for use on export maps, turnaround maps, or print forms can be found on the installation CD in the following path: \Support\Maps\Special\Copymaps

Standard break maps (installed by default during installation) can be found on the installation CD in the following path: \Support\Maps\Install\Source

Special break maps provided can be found on the installation CD in the following path: \Support\Maps\Special\Source

Common Implementations

The table below summarizes common implementation needs, partner editor requirements, and the recommended break maps to accomplish the implementation need.

Data Type	Implementation Need	Partner Editor Requirements	Recommended Break maps
X12	Standard requirements (default installation). No divisional processing. No pass thru processing	The EDI Code in the Partner Definition must either be the interchange level sender identifier (ISA06) or the group level sender identifier (GS02)	ISAbrk.map GSbrk.map STbrk.map BRK997.map
X12	Pass thru processing. No divisional processing	The EDI Code in the Partner Definition must either be the interchange level sender identifier (ISA06) or the group level sender identifier (GS02)	_ISAbrk2.map _GSbrk2.map _STbrk2.map Brk997_2.map
X12	Standard processing for some trading partners and group level divisional processing other trading partners. No pass thru processing	The EDI Code in the Partner Definition should be the interchange level sender identifier (ISA06) for standard partners and the combined value of the group level sender/receiver identifiers (GS02 + GS03) for divisional partners. ***Partner Interchange Definition for all partners utilizing this type of divisional processing must have the exact same name.**	ISAbrk.map Gsbrkdivsr.map STbrk.map BRK997.map
X12	Group level divisional processing for all trading partners. No partner lookup performed at the interchange (ISA) level. No pass thru processing	The EDI Code in the Partner Definition must be the combined value of the group level sender/receiver identifiers (GS02 + GS03) ***Partner Interchange Definition for all partners utilizing this type of divisional processing must have the exact same name.**	ISAbrkDIVNP.map Gsbrkdivsr.map STbrk.map BRK997.map
X12	Standard processing for some trading partners and Interchange level divisional processing for other trading partners. No pass thru processing	The EDI Code in the Partner Definition should be the combined interchange level sender/receiver identifiers (ISA06 + ISA08, *without spaces*) for interchange level divisional partners or the GS02 for standard partners	ISABRKDIVSR.map GSbrk.map STbrk.map BRK997.map
X12	Standard processing for some trading partners and group level divisional processing for other trading partners. Pass thru processing	The EDI Code in the Partner Definition should be the interchange level sender identifier (ISA06) for standard partners and the combined value of the group level sender/receiver identifiers (GS02 + GS03) for divisional partners. ***Partner Interchange Definition for all partners utilizing this type of divisional processing must have the exact same name.**	_ISAbrk2.map GSBRK2DIVSR.map _STbrk2.map Brk997_2.map

X12	Standard processing for some trading partners and Interchange level divisional processing for other trading partners. Pass thru processing	The EDI Code in the Partner Definition should be the combined interchange level sender/receiver identifiers (ISA06 + ISA08, *without spaces*) for interchange level divisional partners or the GS02 for standard partners.	ISAbrk2DIVSR.map _GSbrk2.map _STbrk2.map Brk997_2.map
EDIFACT	Standard requirements (default installation). No divisional processing. No pass thru processing	The EDI Code in the Partner Definition must be the interchange level sender identifier (UNB S002:0004). *Group Break map does not perform partner Select Standard rule.*	UNBBRK.map UNGBRK.map UNHBRK.map CNTRLBRK.map
EDIFACT	Pass thru processing. No divisional processing	The EDI Code in the Partner Definition must be the interchange level sender identifier (UNB S002:0004). *Group Break map does not perform partner Select Standard rule.*	UNBBRK2.map UNGBRK2.map UNHBRK2.map CTRLBRK2.map
EDIFACT	Standard processing for some trading partners and group level divisional processing for other trading partners. No pass thru processing	The EDI Code in the Partner Definition should be the interchange level sender identifier (UNB S002: 0004) for standard partners and the combined value of the group level sender/receiver identifiers (UNG S006:0040 + UNG S007:0044) for divisional partners. ***Partner Interchange Definition for all partners utilizing this type of divisional processing must have the exact same name.**	UNBBRK.map UNGBRKDIVSR.map UNHBRK.map CNTRLBRK.map
EDIFACT	Group level divisional processing for all trading partners. No partner lookup performed at the interchange (UNB) level. No pass thru processing	The EDI Code in the Partner Definition must be the combined value of the group level sender/receiver identifers (UNG S006: 0040 + UNG S007:0044). ***Partner Interchange Definition for all partners utilizing this type of divisional processing must have the exact same name.**	UNBBRKDIVNP.map UNGBRKDIVSR.map UNHBRK.map CNTRLBRK.map

Examples

Example #1

A GENTRAN:Server for Windows user has four (4) trading partners, all of which send 850s and expect 997 acknowledgements to be returned with correct send/receiver identifiers at the group level.

One trading partner, Coyote Corp, is a stand alone company with no separate divisions. The other three trading partners are all part of ACME Corporation comprising of the corporate headquarters and two ACME divisions in Ann Arbor and Dallas.

The AMCE corporate headquarters, Ann Arbor, and Dallas all send the same interchange level (ISA) sender ids but use different group level (GS) sender identifiers.

When possible, the GENTRAN:Server for Windows user prefers to perform partner lookups on incoming EDI data at the interchange level and pass- through processing is not required.

Sample envelope data from all four trading partners is provided below.

Sample Coyote Corp Envelope Data

ISA*00* *00* *ZZ***ABCDEFGHIJ** *ZZ*123456789 *020204*1014*U*00401*000000002*0*P*>~GS*PO***ABCDEFGHIJ***123456789*20020204*1014*2*X*004010~ ST*850*0004~

Sample ACME Corp Corporate Headquarters Envelope Data

ISA*00* *00* *ZZ*ACMECORP *ZZ*123456789 *020204*1014*U*00401*000000002*0*P*>~GS*PO***ACMECORP*123456789***2002020 4*1014*2*X*004010~ ST*850*0004~

Sample ACME Corp Ann Arbor Division Envelope Data

ISA*00* *00* *ZZ*ACMECORP *ZZ*123456789 *020204*1014*U*00401*000000002*0*P*>~GS*PO***ACMEARBOR*123456789***200202 04*1014*2*X*004010~ ST*850*0004~

Sample ACME Corp Dallas Division Envelope Data

ISA*00* *00* *ZZ*ACMECORP *ZZ*123456789 *020204*1014*U*00401*000000002*0*P*>~GS*PO***ACMEDALLAS*123456789***20020 204*1014*2*X*004010~ ST*850*0004~

Example # 1 Solution

Users have two options for this implementation need.
For either option the following applies:
There will be four partners created in the Partner Editor, one for Coyote Corp and one for each of the three ACME divisions.

The GENTRAN:Server for Windows user may perform the partner lookup for Coyote Corporation at the interchange level but must perform the partner lookup for ACME Corp (corporate headquarters and the two divisions) at the group level.

Option A (Use Standard Break Maps)
The following break maps are needed for this option:

ISAbrk.map
Gsbrk.map
STbrk.map
BRK997.map

The EDI Code in the partner definition for each of the four partners will be as follows:

Partner	EDI Code	EDI Code Source
Coyote Corp	ABCDEFGHIJ	(ISA06)
ACME Corp	ACMECORP	(GS02)
ACME Ann Arbor	ACMEARBOR	(GS02)
ACME Dallas	ACMEDALLAS	(GS02)

Option B (Use Special Break Maps)
The following break maps are needed for this option:

ISAbrk.map
Gsbrkdivsr.map
STbrk.map
BRK997.map

The EDI Code in the partner definition for each of the four partners will be as follows:

Partner	EDI Code	EDI Code Source
Coyote Corp	ABCDEFGHIJ	(ISA06)
ACME Corp	ACMECORP123456789	(GS02 + GS03)
ACME Ann Arbor	ACMEARBOR123456789	(GS02 + GS03)
ACME Dallas	ACMEDALLAS123456789	(GS02 + GS03)

Example # 2

A GENTRAN:Server for Windows user, ABLE Company, recently merged with BAKER Company. ABLE and BAKER both conduct electronic commerce with the trading partner CHARLIE Company.

CHARLIE Company wishes to continue to treat ABLE and BAKER as separate suppliers for accounting and quality assurance purposes and requires CONTRL documents to be returned with appropriate sender/receiver identifiers.

CHARLIE sends EDIFACT ORDERS to both ABLE and BAKER.

The interchange level (UNB) sender id for the ORDERS being sent from CHARLIE to both ABLE and BAKER are the same. The receiver identifiers are different: CHARLIE does not send a group level (UNG) envelope segment and ABLE and BAKER do not perform pass-through processing

Sample ORDERS Data From CHARLIE to ABLE

UNB+ANA:1+ CHARLIE123:ZZ+ ABLE456:ZZ+020218:1546+6'
UNH+6+ORDERS:D:93A:UN'

Sample ORDERS Data From CHARLIE to BAKER

UNB+ANA:1+ CHARLIE123:ZZ+BAKER789:ZZ+020218:1546+6'
UNH+6+ORDERS:D:93A:UN'

Example #2 Solution

The following Break maps are needed for this example:

UNBBRKDIVSR.map
UNGBRK.map
UNHBRK.map
CNTRLBRK.map

There will be two partners created in the Partner Editor, one for ABLECHARLIE and one for BAKERCHARLIE. The GENTRAN:Server for Windows user must perform the partner lookup for CHARLIE at the interchange (UNB) level. No group level (UNG) envelope information is provided.

The EDI Code in the Partner Definition for each of the two partners will be as follows:

Partner	EDI Code	EDI Code Source
ABLECHARLIE	CHARLIE123ABLE456	(UNG S006: 0040 + UNG S007:0044)
BAKERCHARLIE	CHARLIE123BAKER789	(UNG S006: 0040 + UNG S007:0044)

Example # 3

A GENTRAN:Server for Windows user has three (3) divisional trading partners (Apple, Orange, and Pear) from the same corporation (Fruit Market Corp) sending 830 documents. Fruit Market expects 997 acknowledgements to be returned with correct sender/receiver ids at the group level.

Sender identifiers for Apple, Orange, and Pear are the same at the interchange and group level. Receiver IDs from each division are different. When possible, the GENTRAN:Server for Windows user prefers to perform partner lookups on incoming EDI data at the interchange level. Pass-through processing is required.

Sample envelope data from all three trading partners is provided below.

Sample Apple Envelope Data

ISA*00* *00* *ZZ***FRUITMKT** *ZZ***123456789**
*020204*1014*U*00401*000000002*0*P*>~GS*PS*FRUITMKT*123456789*20020204*
1014*2*X*004010~ ST*830*0004~

Sample Orange Envelope Data

ISA*00* *00* *ZZ***FRUITMKT** *ZZ***222333444**
*020204*1014*U*00401*000000002*0*P*>~GS*PS*FRUITMKT*222333444*20020204*
1014*2*X*004010~ ST*830*0004~

Sample Pear Envelope Data

ISA*00* *00* *ZZ***FRUITMKT** *ZZ***666777888**
*020204*1014*U*00401*000000002*0*P*>~GS*PS*FRUITMKT*666777888*20020204*
1014*2*X*004010~ ST*830*0004~

Example # 3 Solution

The following Break map are needed for this example:

ISABRK2DIVSR.map
_GSBRK2.map
_STBRK2.map
BRK997_2.map

There will be three partners created in the Partner Editor, one for Apple, one for Orange, and one for Pear. The GENTRAN:Server for Windows user desires the partner lookup to be performed at the interchange (ISA) level in combination with pass thru processing.

The EDI Code in the partner definition for each of the three partners will be as follows:

Partner	EDI Code	EDI Code Source
Apple	FRUITMKT123456789	(ISA06 + ISA08)
Orange	FRUITMKT222333444	(ISA06 + ISA08)
Pear	FRUITMKT666777888	(ISA06 + ISA08)