

# 830 Planning Schedule with Release Capability

ANSI X12-4010

Vendor Implementation Guide

Document Version 1.2

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# 830 Planning Schedule with Release Capability

Functional Group ID=PS

## Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Planning Schedule with Release Capability Transaction Set (830) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business practice relative to the transfer of forecasting/material release information between organizations. The planning schedule transaction may be used in various ways or in a combination of ways, such as: (1) a simple forecast; (2) a forecast with the buyer's authorization for the seller to commit to resources, such as labor or material; (3) a forecast that is also used as an order release mechanism, containing such elements as resource authorizations, period-to-date cumulative quantities, and specific ship/delivery patterns for requirements that have been represented in "buckets," such as weekly, monthly, or quarterly. The order release forecast may also contain all data related to purchase orders, as required, because the order release capability eliminates the need for discrete generation of purchase orders.

## Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BFR	Beginning Segment for Planning Schedule	M	1		
	050	REF	Reference Identification	O	12		
LOOP ID - N1						200	
	230	N1	Name	O	1		

## Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
LOOP ID - LIN						>1	
M	010	LIN	Item Identification	M	1		
	020	UIT	Unit Detail	O	1		
LOOP ID - FST						>1	
	410	FST	Forecast Schedule	O	1		n1
	420	SDQ	Destination Quantity	O	50		

## Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
	010	CTT	Transaction Totals	O	1		n2
M	020	SE	Transaction Set Trailer	M	1		

## Transaction Set Notes

- At least one occurrence of segment FST is required, either in the FST loop or within the SDP loop. These two loops are mutually exclusive.
- Number of line items (CTT01) is the accumulation of the number of LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (FST01) for each FST segment.

**Segment:** **ST** Transaction Set Header  
**Position:** 010  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the start of a transaction set and to assign a control number  
**Syntax Notes:**  
**Semantic Notes:** 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).  
**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	ST01	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set 830 Planning Schedule with Release Capability	M ID 3/3
M	ST02	329	<b>Transaction Set Control Number</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

**Segment:** **BFR** Beginning Segment for Planning Schedule  
**Position:** 020  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates

- Syntax Notes:** 1 At least one of BFR02 or BFR03 is required.  
**Semantic Notes:** 1 If BFR01 contains the value "04" (Net Change), BFR09 is required.  
 2 BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.  
 3 BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins.  
 4 BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends.  
 5 BFR08 is the date forecast generated: The date the forecast data was generated.  
 6 BFR09 is the date forecast updated: The date the forecast was updated with "net change" data. (Used only when data element 353 in BFR01 contains the value "04", meaning net change.)

**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	BFR01	353	<b>Transaction Set Purpose Code</b> Code identifying purpose of transaction set 00 Original	M ID 2/2
	BFR02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Sequential Number Assigned by CVS	X AN 1/30
M	BFR04	675	<b>Schedule Type Qualifier</b> Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast BB Customer Production (Consumption) Based	M ID 2/2
M	BFR05	676	<b>Schedule Quantity Qualifier</b> Code identifying the type of quantities used when defining a schedule or forecast A Actual Discrete Quantities	M ID 1/1
M	BFR06	373	<b>Date</b> Date expressed as CCYYMMDD Beginning Date of first FST in CCYYMMDD	M DT 8/8
	BFR07	373	<b>Date</b> Date expressed as CCYYMMDD Ending Date in last FST in CCYYMMDD	O DT 8/8
M	BFR08	373	<b>Date</b> Date expressed as CCYYMMDD Data Creation Date in CCYYMMDD	M DT 8/8

**Segment:** **REF** Reference Identification  
**Position:** 050  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 12  
**Purpose:** To specify identifying information  
**Syntax Notes:**

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:**

- 1 REF04 contains data relating to the value cited in REF02.

**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification VR Vendor ID Number	M ID 2/3
	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier CVS Vendor ID Number	X AN 1/30

**Segment:** **N1** Name  
**Position:** 230  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To identify a party by type of organization, name, and code  
**Syntax Notes:**

- 1 At least one of N102 or N103 is required.
- 2 If either N103 or N104 is present, then the other is required.

**Semantic Notes:**  
**Comments:**

- 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
- 2 N105 and N106 further define the type of entity in N101.

#### Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N101	98 <b>Entity Identifier Code</b>	M ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual	
		FR Message From	
	N103	66 <b>Identification Code Qualifier</b>	X ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)	
		1 D-U-N-S Number, Dun & Bradstreet	
	N104	67 <b>Identification Code</b>	X AN 2/80
		Code identifying a party or other code	
		001786664 - CVS Duns Number	

**Segment:** **LIN** Item Identification

**Position:** 010

**Loop:** LIN Mandatory

**Level:** Detail

**Usage:** Mandatory

**Max Use:** 1

**Purpose:** To specify basic item identification data

**Syntax Notes:**

- 1 If either LIN04 or LIN05 is present, then the other is required.
- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

**Semantic Notes:**

**Comments:**

- 1 LIN01 is the line item identification
- 1 See the Data Dictionary for a complete list of IDs.
- 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

#### Data Element Summary

Ref.	Data Element	Name	Attributes
M	LIN02	Product/Service ID Qualifier	M ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		IN Buyer's Item Number	
M	LIN03	Product/Service ID	M AN 1/48
		Identifying number for a product or service	
		CVS Item Number	
	LIN04	Product/Service ID Qualifier	X ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		UI U.P.C. Consumer Package Code (1-5-5)	
	LIN05	Product/Service ID	X AN 1/48
		Identifying number for a product or service	
		UPC Number or NDC Number	
	LIN06	Product/Service ID Qualifier	X ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		UA U.P.C./EAN Case Code (2-5-5)	
	LIN07	Product/Service ID	X AN 1/48
		Identifying number for a product or service	
		UPC Number	

**Segment:** **UIT** Unit Detail  
**Position:** 020  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify item unit data  
**Syntax Notes:** 1 If UIT03 is present, then UIT02 is required.  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	UIT01	C001	<b>Composite Unit of Measure</b> To identify a composite unit of measure (See Figures Appendix for examples of use)	M
M	C00101	355	<b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken PC Piece	M ID 2/2

<b>Segment:</b>	<b>FST Forecast Schedule</b>
<b>Position:</b>	410
<b>Loop:</b>	FST      Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify the forecasted dates and quantities
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 If either FST06 or FST07 is present, then the other is required.</li> <li>2 If either FST08 or FST09 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 If FST03 equals "F" (indicating flexible interval), then FST04 and FST05 are required. FST04 would be used for the start date of the flexible interval and FST05 would be used for the end date of the flexible interval.</li> </ol>
<b>Comments:</b>	<ol style="list-style-type: none"> <li>1 As qualified by FST02 and FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket (weekly, monthly, quarterly, etc.) or the start date of a flexible interval.</li> <li>2 FST06 qualifies the time in FST07. The purpose of the FST07 element is to express the specific time of day in a 24-hour clock to satisfy "just-in-time" requirements. As an alternative, the ship/delivery pattern segment (SDP) may be used to define an approximate time, such as a.m. or p.m.</li> </ol>

**Data Element Summary**

<b>Ref.</b>	<b>Data</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element    Name</b>	<b></b>
M	<b>FST01    380    Quantity</b> Numeric value of quantity	M   R 1/15
M	<b>FST02    680    Forecast Qualifier</b> Code specifying the sender's confidence level of the forecast data or an action associated with a forecast D                                  Planning	M   ID 1/1
M	<b>FST03    681    Forecast Timing Qualifier</b> Code specifying interval grouping of the forecast F                                  Flexible Interval (from Date X through Date Y)	M   ID 1/1
M	<b>FST04    373    Date</b> Date expressed as CCYYMMDD Beginning Date in CCYYMMDD	M   DT 8/8
	<b>FST05    373    Date</b> Date expressed as CCYYMMDD Ending Date in CCYYMMDD	O   DT 8/8

**Segment:** **SDQ** Destination Quantity

**Position:** 420

**Loop:** FST Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 50

**Purpose:** To specify destination and quantity detail

**Syntax Notes:**

- 1 If either SDQ05 or SDQ06 is present, then the other is required.
- 2 If either SDQ07 or SDQ08 is present, then the other is required.
- 3 If either SDQ09 or SDQ10 is present, then the other is required.
- 4 If either SDQ11 or SDQ12 is present, then the other is required.
- 5 If either SDQ13 or SDQ14 is present, then the other is required.
- 6 If either SDQ15 or SDQ16 is present, then the other is required.
- 7 If either SDQ17 or SDQ18 is present, then the other is required.
- 8 If either SDQ19 or SDQ20 is present, then the other is required.
- 9 If either SDQ21 or SDQ22 is present, then the other is required.

**Semantic Notes:**

- 1 SDQ23 identifies the area within the location identified in SDQ03, SDQ05, SDQ07, SDQ09, SDQ11, SDQ13, SDQ15, SDQ17, SDQ19, and SDQ21.

**Comments:**

- 1 SDQ02 is used only if different than previously defined in the transaction set.
- 2 SDQ03 is the store number.
- 3 SDQ23 may be used to identify areas within a store, e.g., front room, back room, selling outpost, end aisle display, etc. The value is agreed to by trading partners or industry conventions.

#### Data Element Summary

Ref.	Des.	Data Element	Name	Attributes
M	SDQ01	355	<b>Unit or Basis for Measurement Code</b>	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			PC Piece	
	SDQ02	66	<b>Identification Code Qualifier</b>	O ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			54 Warehouse	
			See <a href="http://cvssuppliers.com">http://cvssuppliers.com</a> for pertinent DC Codes listed in 'Distribution Center ID XREF_12.04.25' document.	
			92 Assigned by Buyer or Buyer's Agent	
M	SDQ03	67	<b>Identification Code</b>	M AN 2/80
			Code identifying a party or other code	
			CVS DC Code (E.g. W101, F202)	
			Store Number (E.g. 10951, 00212)	
M	SDQ04	380	<b>Quantity</b>	M R 1/15
			Numeric value of quantity	
	SDQ05	67	<b>Identification Code</b>	X AN 2/80
			Code identifying a party or other code	
			CVS DC Code (E.g. W101, F202)	
			Store Number (E.g. 10951, 00212)	
	SDQ06	380	<b>Quantity</b>	X R 1/15
			Numeric value of quantity	

<b>SDQ07</b>	<b>67</b>	<b>Identification Code</b>	<b>X</b>	<b>AN 2/80</b>
		Code identifying a party or other code		
		CVS DC Code (E.g. W101, F202)		
		Store Number (E.g. 10951, 00212)		
<b>SDQ08</b>	<b>380</b>	<b>Quantity</b>	<b>X</b>	<b>R 1/15</b>
		Numeric value of quantity		
<b>SDQ09</b>	<b>67</b>	<b>Identification Code</b>	<b>X</b>	<b>AN 2/80</b>
		Code identifying a party or other code		
		CVS DC Code (E.g. W101, F202)		
		Store Number (E.g. 10951, 00212)		
<b>SDQ10</b>	<b>380</b>	<b>Quantity</b>	<b>X</b>	<b>R 1/15</b>
		Numeric value of quantity		
<b>SDQ11</b>	<b>67</b>	<b>Identification Code</b>	<b>X</b>	<b>AN 2/80</b>
		Code identifying a party or other code		
		CVS DC Code (E.g. W101, F202)		
		Store Number (E.g. 10951, 00212)		
<b>SDQ12</b>	<b>380</b>	<b>Quantity</b>	<b>X</b>	<b>R 1/15</b>
		Numeric value of quantity		
<b>SDQ13</b>	<b>67</b>	<b>Identification Code</b>	<b>X</b>	<b>AN 2/80</b>
		Code identifying a party or other code		
		CVS DC Code (E.g. W101, F202)		
		Store Number (E.g. 10951, 00212)		
<b>SDQ14</b>	<b>380</b>	<b>Quantity</b>	<b>X</b>	<b>R 1/15</b>
		Numeric value of quantity		
<b>SDQ15</b>	<b>67</b>	<b>Identification Code</b>	<b>X</b>	<b>AN 2/80</b>
		Code identifying a party or other code		
		CVS DC Code (E.g. W101, F202)		
		Store Number (E.g. 10951, 00212)		
<b>SDQ16</b>	<b>380</b>	<b>Quantity</b>	<b>X</b>	<b>R 1/15</b>
		Numeric value of quantity		
<b>SDQ17</b>	<b>67</b>	<b>Identification Code</b>	<b>X</b>	<b>AN 2/80</b>
		Code identifying a party or other code		
		CVS DC Code (E.g. W101, F202)		
		Store Number (E.g. 10951, 00212)		
<b>SDQ18</b>	<b>380</b>	<b>Quantity</b>	<b>X</b>	<b>R 1/15</b>
		Numeric value of quantity		
<b>SDQ19</b>	<b>67</b>	<b>Identification Code</b>	<b>X</b>	<b>AN 2/80</b>
		Code identifying a party or other code		
		CVS DC Code (E.g. W101, F202)		
		Store Number (E.g. 10951, 00212)		
<b>SDQ20</b>	<b>380</b>	<b>Quantity</b>	<b>X</b>	<b>R 1/15</b>
		Numeric value of quantity		
<b>SDQ21</b>	<b>67</b>	<b>Identification Code</b>	<b>X</b>	<b>AN 2/80</b>
		Code identifying a party or other code		
		CVS DC Code (E.g. W101, F202)		
		Store Number (E.g. 10951, 00212)		
<b>SDQ22</b>	<b>380</b>	<b>Quantity</b>	<b>X</b>	<b>R 1/15</b>
		Numeric value of quantity		

<b>SDQ23</b>	<b>310</b>	<b>Location Identifier</b>	<b>O AN 1/30</b>
		Code which identifies a specific location	
		CVS DC Code (E.g. W101, F202)	
		Store Number (E.g. 10951, 00212)	

**Segment:** **CTT** Transaction Totals  
**Position:** 010  
**Loop:**  
**Level:** Summary  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To transmit a hash total for a specific element in the transaction set  
**Syntax Notes:**

- 1 If either CTT03 or CTT04 is present, then the other is required.
- 2 If either CTT05 or CTT06 is present, then the other is required.

**Semantic Notes:**  
**Comments:**

- 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
M	CTT01	354 Number of Line Items	M N0 1/6
		Total number of line items in the transaction set	

**Segment:** **SE** Transaction Set Trailer  
**Position:** 020  
**Loop:**  
**Level:** Summary  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

**Syntax Notes:**

**Semantic Notes:**

**Comments:** 1 SE is the last segment of each transaction set.

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>		
	<b>Des.</b>	<b>Element</b>	<b>Name</b>	<b>Attributes</b>
M	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
M	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

## Sample Data

### Warehouse Sample:

ISA\*00\* \*00\* \*ZZ\*CVS \*ZZ\*6109719600 \*171020\*1719\*U\*00400\*000084886\*0\*P\*~  
GS\*PS\*CVS\*6109719600\*20171020\*1719\*96\*X\*004010~  
ST\*830\*0184~  
BFR\*00\*00\*\*BB\*A\*20171112\*20171118\*20171020~  
REF\*VR\*40641~  
N1\*FR\*\*1\*001786664~  
LIN\*\*IN\*925390\*UI\*05042844452\*UA\*00000000000000~  
UIT\*PC~  
FST\*64\*D\*F\*20171112\*20171118~  
SDQ\*PC\*54\*C101\*64~  
LIN\*\*IN\*925390\*UI\*05042844452\*UA\*00000000000000~  
UIT\*PC~  
FST\*7168\*D\*F\*20171119\*20171125~  
SDQ\*PC\*54\*L101\*3648\*M101\*1920\*O101\*1600~  
LIN\*\*IN\*925390\*UI\*05042844452\*UA\*00000000000000~  
UIT\*PC~  
FST\*192\*D\*F\*20171126\*20171202~  
SDQ\*PC\*54\*L101\*64\*M101\*64\*O101\*64~  
CTT\*3~  
SE\*18\*0184~  
GE\*1\*96~  
IEA\*1\*000084886~

**Store Sample:**

ISA\*00\* \*00\* \*ZZ\*CVS \*ZZ\*6109719600 \*171020\*1719\*U\*00400\*000084886\*0\*P\*~  
GS\*PS\*CVS\*6109719600\*20171020\*1719\*96\*X\*004010~  
ST\*830\*0184~  
BFR\*00\*00\*\*BB\*A\*20171112\*20171118\*20171020~  
REF\*VR\*40641~  
N1\*FR\*\*1\*001786664~  
LIN\*\*IN\*925390\*UI\*05042844452\*UA\*00000000000000~  
UIT\*PC~  
FST\*64\*D\*F\*20171112\*20171118~  
SDQ\*PC\*92\*10951\*64~  
LIN\*\*IN\*925390\*UI\*05042844452\*UA\*00000000000000~  
UIT\*PC~  
FST\*7168\*D\*F\*20171119\*20171125~  
SDQ\*PC\*92\*00212\*3648\*10951\*1920\*10152\*1600~  
LIN\*\*IN\*925390\*UI\*05042844452\*UA\*00000000000000~  
UIT\*PC~  
FST\*192\*D\*F\*20171126\*20171202~  
SDQ\*PC\*92\*21056\*64\*31000\*64\*11123\*64~  
CTT\*3~  
SE\*18\*0184~  
GE\*1\*96~  
IEA\*1\*000084886~