

# 1998 DI USERS GROUP

---

## How Meijer, Inc. Uses DataInterchange To ...

Perform Batch Partner Maintenance

Auto Monitor EDI Transactions

Auto Monitor Partner FA's

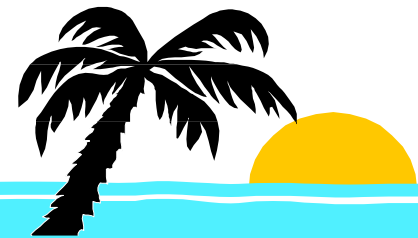
Kelly Sanford  
Meijer, Inc.

# MEIJER OVERVIEW



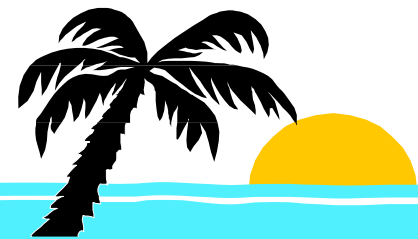
## MEIJER OVERVIEW

- Meijer, Inc. is a privately held regional retailer with 117 discount-format super center stores.
- Meijer has been in the retail business for over 60 years.

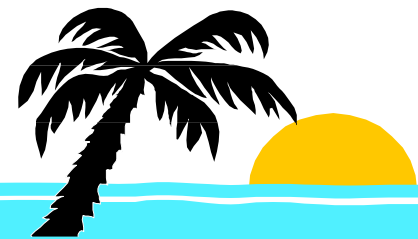


## Meijer EDI ...

- **EDI Translator: DI MVS-CICS 2.1**
- **EDI COMMUNICATIONS:**
  - IBM/QRS for all VAN connections
  - STERLING MAILBOX for all direct connect
- **3000+ Trading Partners**
- **3 EDI Standards: X12, UCS, VICS**
- **15 EDI Transaction Sets**



- **The Meijer QR/ECR EDI initiative is managed by V.P.'s, staffed by liaison, from these areas of the company:**
  - Merchandise
  - Finance
  - Logistics
  - ITS
  - Store Operations

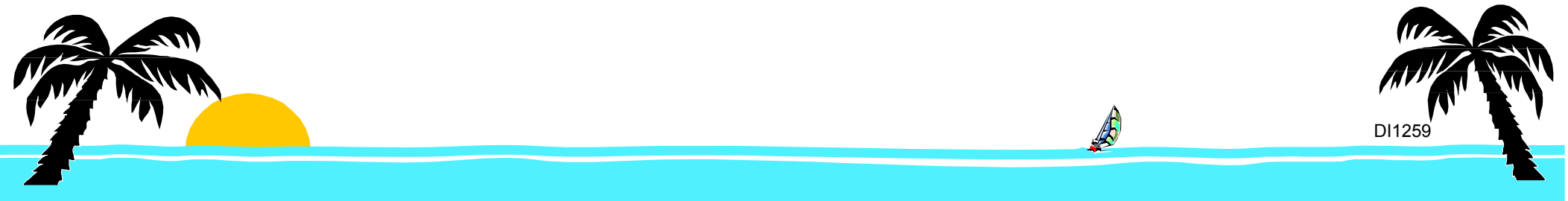


# BATCH PARTNER MAINTENANCE



## Business Need For Batch Partner Maintenance

- Partner Maintenance can be entered for a current or future effective date
- Resource savings due to minimum entry of data to make the requested change
- Allowed the transition of Partner Maintenance from IT EDI to Business EDI
- Screen edits can ensure accurate entry



## Batch Partner Maintenance Overview

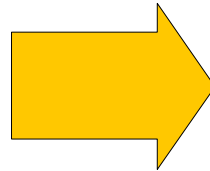
ENTER BATCH  
PARTNER  
MAINTENANCE  
BY EFFECTIVE DATE





## Batch Partner Maintenance Overview

ENTER BATCH  
PARTNER  
MAINTENANCE  
BY EFFECTIVE DATE

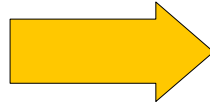


EXPORT DI  
PROFILES  
& USAGES

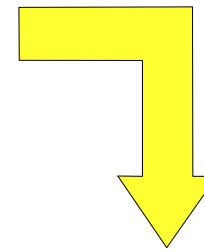


## Batch Partner Maintenance Overview

ENTER BATCH  
PARTNER  
MAINTENANCE  
BY EFFECTIVE DATE



EXPORT DI  
PROFILES  
& USAGES

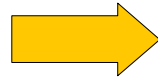


APPLY BATCH  
PARTNER  
MAINTENANCE  
ON EFFECTIVE  
DATE

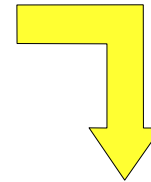


## Batch Partner Maintenance Overview

ENTER BATCH  
PARTNER  
MAINTENANCE  
BY EFFECTIVE DATE



EXPORT DI  
PROFILES  
& USAGES



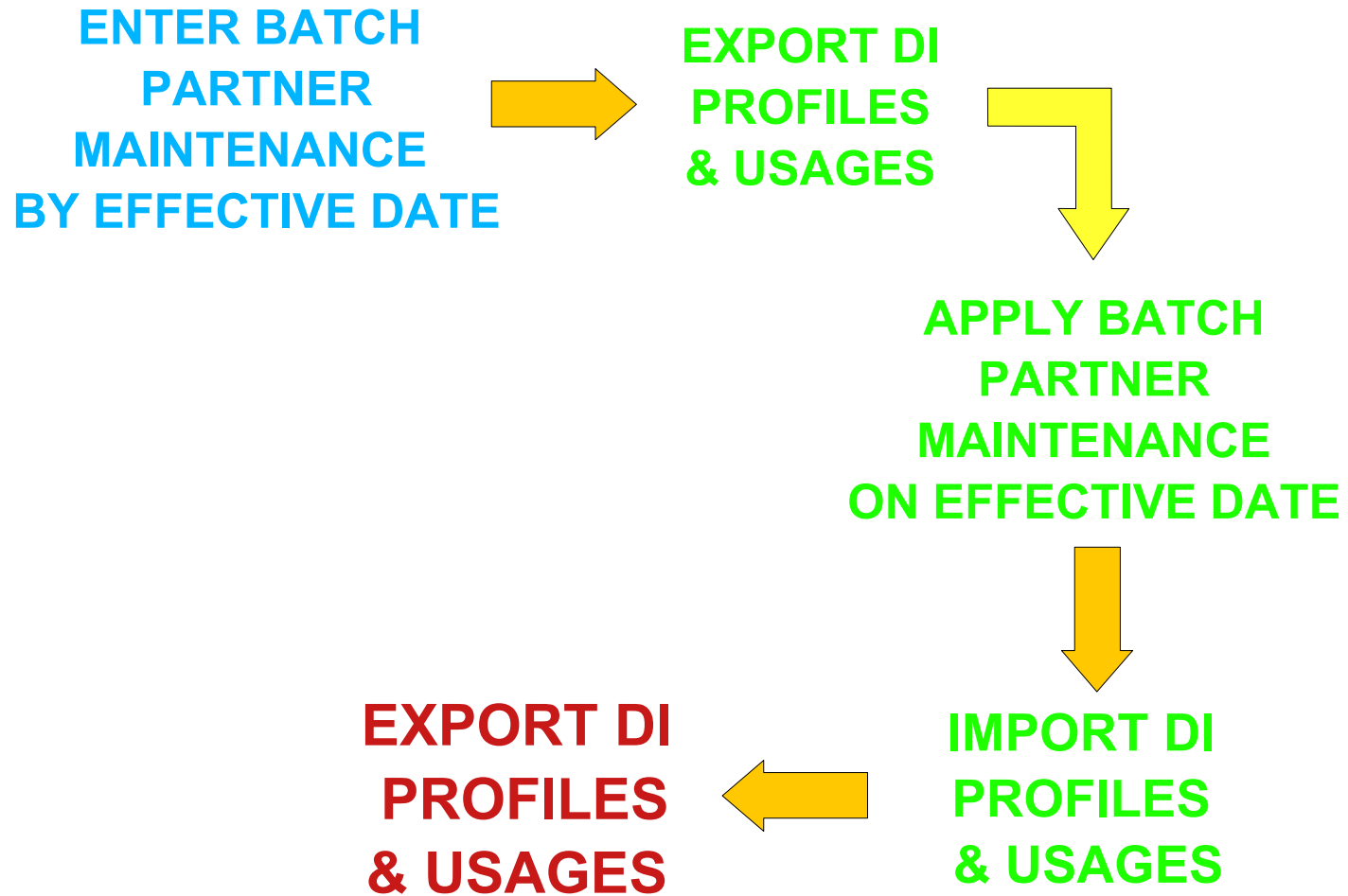
APPLY BATCH  
PARTNER  
MAINTENANCE  
ON EFFECTIVE DATE



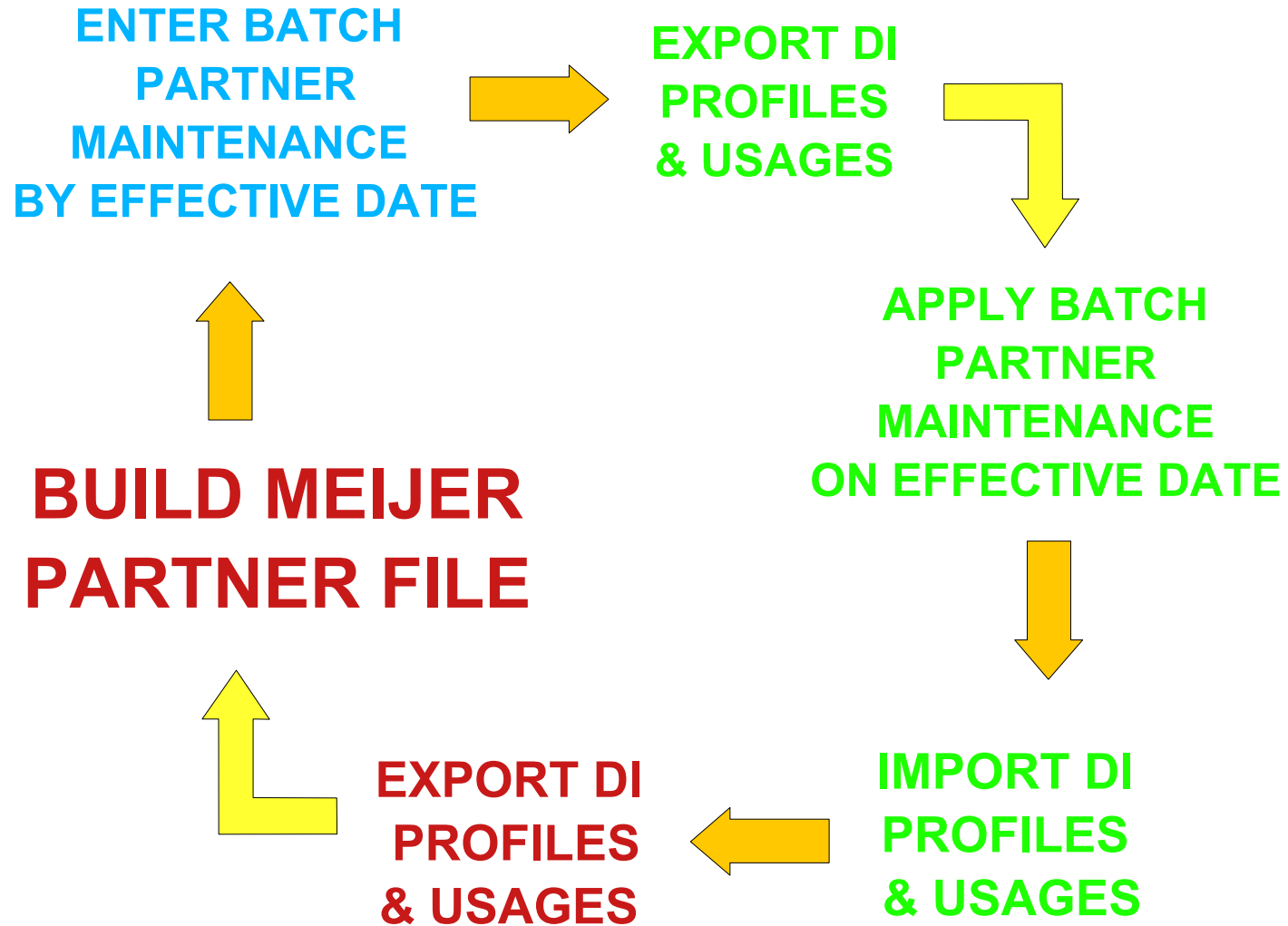
IMPORT DI  
PROFILES  
& USAGES



## Batch Partner Maintenance Overview



## Batch Partner Maintenance Overview



## Batch Partner Maintenance Updates

### ▪ Profile Updates:

- Change Contact/Phone/Address
- Network Id Change
- Interconnect Change

### ▪ Future:

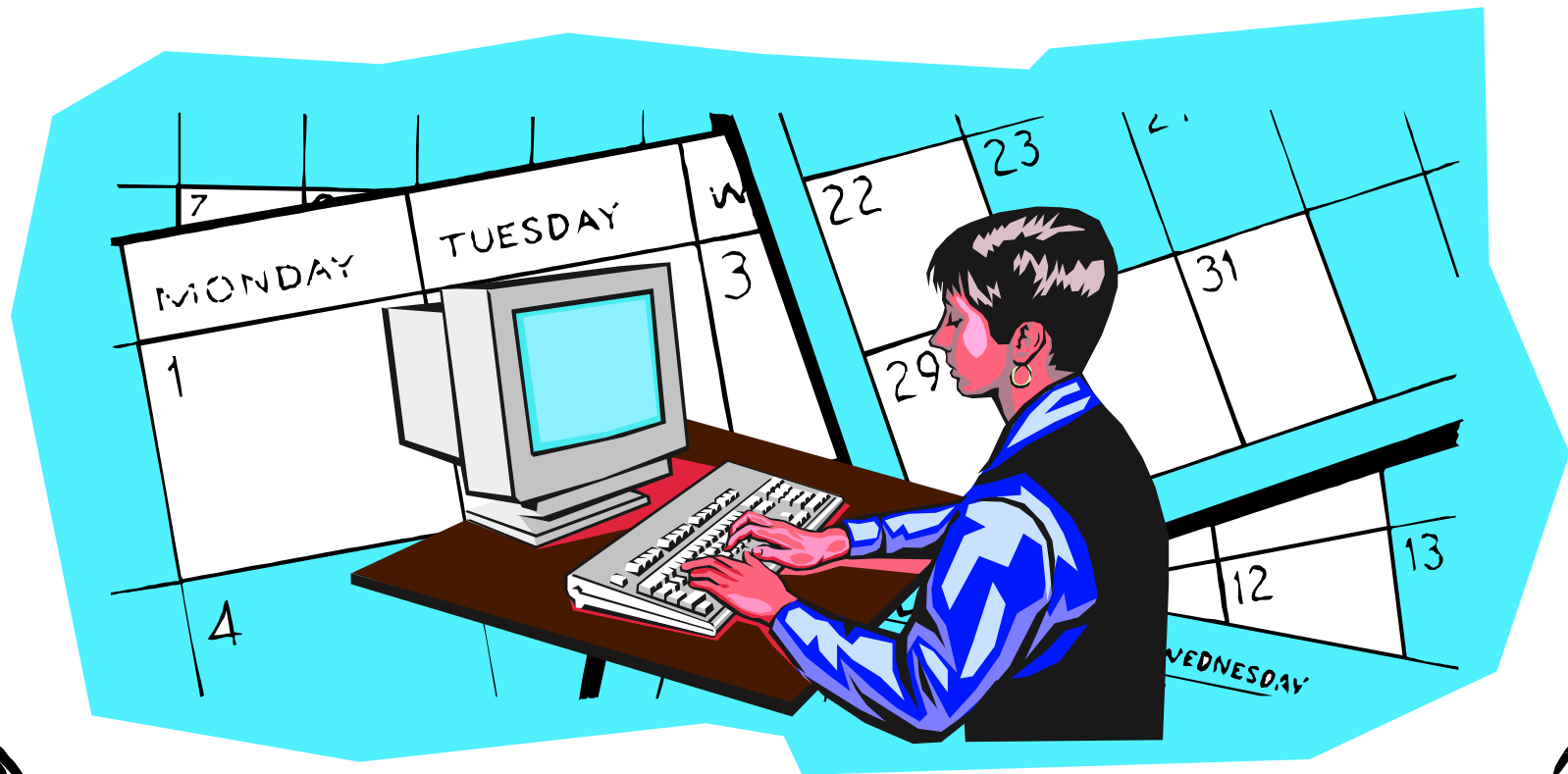
- Add Partner Profile

### ▪ Usage Updates:

- Version Change
- Group Receiver Id
- Add Transaction Set
- Change Transaction:
  - Migrate Transaction
  - Activate/Deactivate
  - Application File Id
  - Variable Overdue FA Hours



## ENTER BATCH PARTNER MAINTENANCE BY EFFECTIVE DATE



## Batch Partner Maintenance

M140313A MEIJER EDI TECH MENU 08/06/98  
07:24:24  
SANFORDK

ENTER SELECTION: PARTNER:

1. NICKNAME/PARTNER ID XREF
2. CREATE VERSION MAINTENANCE
3. UPDATE/REMOVE VERSION MAINTENANCE
4. CREATE OTHER MAINTENANCE
5. UPDATE/REMOVE OTHER MAINTENANCE
6. CREATE PARTNER PROFILE MAINTENANCE
7. UPDATE/REMOVE PROFILE MAINTENANCE





# Batch Partner Maintenance

```

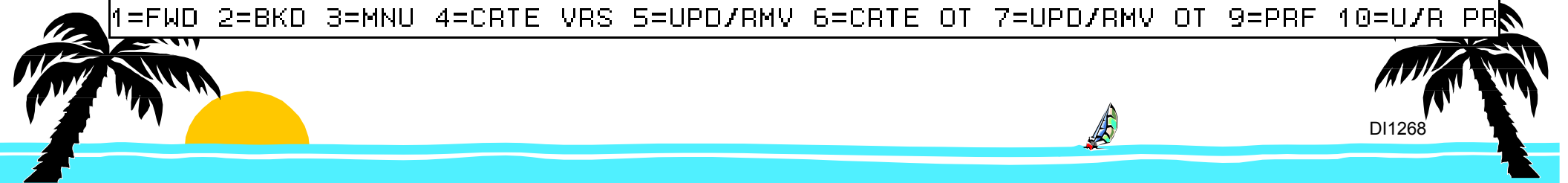
M140311A          NICKNAME/PARTNER ID XREF          08/06/9
PROD:   N          PRE-PROD:   Y                   07:47:2
PARTNER ID:  123          QUAL:                   SANFORD
NICKNAME:

```

S	PARTNER ID	QUAL	PASSWORD	NICKNAME
	1235746	01		DANAPERFUMECORP
	123637480	01		KARENCARSONCREAT
	124258799	01		WESTEPHENSFMFGCO
	1243062	01		BABYFAIR
	1247766	01		SLICHTENBERG&CO
	1256353AD	01		ARTMATICCOSMETIC
	1256353TD	01		ARTMATICCOSMET
	130199433	01		GOODTIMESVIDEO
	130210214	01		FUNSTUFF
	1303338	01		CURTRONINC
	130504806	01		TECMO
	130700610	01		RUBATEXCORP
	130798432	01		BRETLIN/TRIBUNE

1=FWD 2=BKD 3=MNU 4=CRTE VRS 5=UPD/RMV 6=CRTE OT 7=UPD/RMV OT 9=PRF 10=U/R PR

copyrighted by Meijer, Inc.



## Batch Partner Maintenance

M140311A	NICKNAME/PARTNER ID XREF			08/06/9
PROD: N	PRE-PROD: Y			08:33:4
PARTNER ID:		QUAL:		SANFORD
NICKNAME: KIT				
S	PARTNER ID	QUAL	PASSWORD	NICKNAME
	122547490	01		KITCHENAIDINC
	KIWIUSF	ZZ		KIWIBRAND
	001269919	01		KLEAR-VUCORP
	6113570000	08		KLEINERTSINCOFAL
	006024699	01		KNAPE&VOGTMFGCO
	7706232650	12		KNIGHTDISTCO
	8034458115	12		KNIGHTINDUSTRIES
	9253930000	08		KNOUSEFOODS-U
	005224589	01		KNOXFERTILIZER
	2489672020	12		KOEPLINGERS
	3122474494	12		KOLCRAFT
	3143439220	12		KOLLERCRAFTPLAST
	8177638011	12		KONSYLPHARM
1=FWD 2=BKD 3=MNU 4=CRTE VRS 5=UPD/RMV 6=CRTE OT 7=UPD/RMV OT 9=PRF 10=U/R PR				



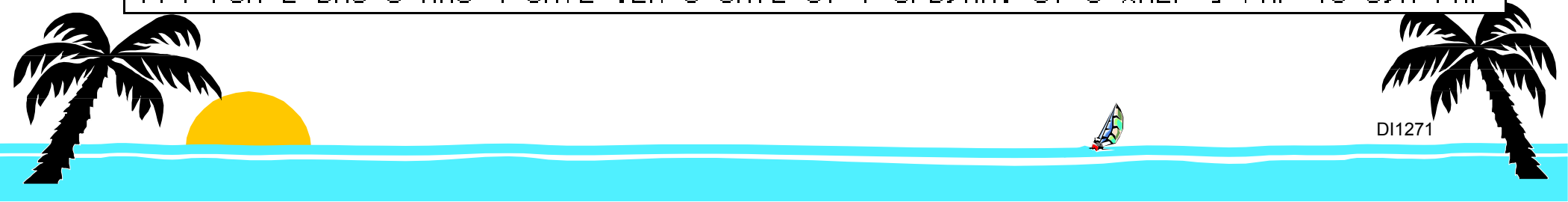


## Batch Partner Maintenance

M140315A		(UPDATE/REMOVE) PARTNER VERSION MAINTENANCE						08/06/98	
NEXT PARTNER								08:34:26	
								SANFORDK	
U/R	PARTNER/COMM ID	QUAL	EFF. DATE	TRANS SET	NEW VERSION	PRE-PROD?	PROD?	ASSOC	
	001903384	01	100198	850	3070	Y	Y	TOLODZIA	
	005035167	01	090198	ALL	3060VICS	Y	Y	TOLODZIA	
	041769696	01	113098	850	3070	Y	Y	TOLODZIA	
U	058977604	01	090198	850	3060	Y	Y	TOLODZIA	
	130798432	01	110198	850	3060	Y	Y	TOLODZIA	
	192559656	01	082898	850	3060VICS	Y	Y	TOLODZIA	
	200078673	01	100398	850	3070	Y	Y	TOLODZIA	
R	2164251404	12	100198	ALL	3060VICS	Y	Y	TOLODZIA	
	4145547000	12	103198	850	3060	Y	Y	TOLODZIA	
	6112610000	01	100198	850	3060VICS	Y	Y	TOLODZIA	
	925207PSTA	08	081098	875	3060UCS	Y	Y	TOLODZIA	
	9252070TST	08	081098	875	3060UCS	Y	N	TOLODZIA	

PF1=F0R 2=BAC 3=MNU 4=CRTE VER 6=CRTE OT 7=UPD/RMV OT 8=XREF 9=PRF 10=U/R PRF

copyrighted by Meijer, Inc.



## Batch Partner Maintenance

```
M140316A          (CREATE) OTHER PARTNER MAINTENANCE          08/06/98
                                                           07:59:00
PART/COMM ID:    KELR KELR001          QUAL:  ZZ          KELLERLADDERSINC          SANFORDK
INTERCHANGE LEVEL/BG ENVELOPE:
  NEW UCS RECEIVER ID:
  EFFECTIVE DATE:
  NEW UCS COMM PASSWORD:
  EFFECTIVE DATE:
GROUP LEVEL:
  GROUP ID:      PO          NEW RECEIVER ID:    12345678
  EFFECTIVE DATE: 030899          PROD:      Y          PRE-PROD:  Y
TRANSACTION LEVEL:
  TRANSACTION SET:          ACTIVATE/DEACTIVATE:          OVERDUE AFTER:          HRS
  EFFECTIVE DATE:          PROD:      N          PRE-PROD:  N
  ADD TRANS ID:          VERS:          OVERDUE:          MODEM:
  GS PART ID:          EFFECT DATE:          PROD:      N          PRE-PROD:  N
DATA SEPARATION:
  FILE ID:          DIR:          EFFECT DATE:          PROD:      N          PRE-PROD:  N
TRANSACTION MIGRATE:
  TRANSACTION SET:          SYSTEM (P/T):          EFFECTIVE DATE:
B=MNU 4=CRTE VERS 5=UPD/RMV VERS 7=UPD/RMV OTH 8=XREF 9=PRF 10=UPD/RMV PRF
```

## Batch Partner Maintenance

```
M140316A          (CREATE) OTHER PARTNER MAINTENANCE          08/06/98
                                                           07:59:00
PART/COMM ID:    KELR KELR001          QUAL:  ZZ          KELLERLADDERSINC          SANFORDK
INTERCHANGE LEVEL/BG ENVELOPE:
  NEW UCS RECEIVER ID:
  EFFECTIVE DATE:
  NEW UCS COMM PASSWORD:
  EFFECTIVE DATE:
GROUP LEVEL:
  GROUP ID:              NEW RECEIVER ID:
  EFFECTIVE DATE:              PROD:  N          PRE-PROD:  N
TRANSACTION LEVEL:
  TRANSACTION SET:    850  ACTIVATE/DEACTIVATE:          OVERDUE AFTER:    072  HRS
  EFFECTIVE DATE:    120198          PROD:  Y          PRE-PROD:  Y
  ADD TRANS ID:      VERS:              OVERDUE:          MODEM:
  GS PART ID:              EFFECT DATE:          PROD:  N          PRE-PROD:  N
DATA SEPARATION:
  FILE ID:              DIR:          EFFECT DATE:          PROD:  N          PRE-PROD:  N
TRANSACTION MIGRATE:
  TRANSACTION SET:          SYSTEM (P/T):          EFFECTIVE DATE:
3=MNU 4=CRTE VERS 5=UPD/RMV VERS 7=UPD/RMV OTH 8=XREF 9=PRF 10=UPD/RMV PRF
```

## Batch Partner Maintenance

```
M140317A          (UPDATE/REMOVE) OTHER PARTNER MAINTNENACE          08/06/98
NEXT PARTNER:                                          08:12:57
PARTNER/COMM ID:  KELR KELR001          QUAL:  ZZ          KELLERLADDERSINC  SANFORDK
INTERCHANGE LEVEL/BG ENVELOPES:
  NEW UCS RECEIVER ID:          ACTION CODE:  I          ASSOC:
  EFFECTIVE DATE:
  NEW UCS COMM PASSWORD:        ACTION CODE:  I          ASSOC:
  EFFECTIVE DATE:
GROUP LEVEL:          ACTION CODE:  I          ASSOC:
  GROUP ID:          NEW RECEIVER ID:
  EFFECTIVE DATE:          PROD:  N          PRE-PROD:  N
TRANSACTION LEVEL:          ACTION CODE:  I          ASSOC:
  TRANSACTION SET:          ACTIVATE/DEACTIVATE:          OVERDUE AFTER          HRS
  EFFECTIVE DATE:          PROD:  N          PRE-PROD:  N
          ACTION CODE:  I          ASSOC:  SANFORDK
  ADD TRANS ID:  810  VERS:  3070VICS  OVERDUE:  000  PHONE/MODEM:
  GS PART ID:  12345678  EFFECT DATE:  110198  PROD:  N          PRE-PROD:  Y
DATA SEPARATION:          ACTION CODE:  I          ASSOC:
  FILE ID:          DIR:          EFFECTIVE DATE:          PROD:  N          PRE-PROD:
TRANSACTION MIGRATION:          ACTION CODE:  I          ASSOC:
  TRANSACTION SET:          SYSTEM (P/T):          EFFECTIVE DATE:
1=FOR 2=BAC 3=MNU 4=CRTE VER 5=UPD/RMV VER 6=CRTE OTH 8=XRF 9=PRF 10=U/R PRF
```

## Batch Partner Maintenance

```
M140316A          (CREATE) OTHER PARTNER MAINTENANCE          08/06/98
                                                           07:59:00
PART/COMM ID:    KELR KELR001      QUAL:  ZZ      KELLERLADDERSINC      SANFORDK
INTERCHANGE LEVEL/BG ENVELOPE:
  NEW UCS RECEIVER ID:
  EFFECTIVE DATE:
  NEW UCS COMM PASSWORD:
  EFFECTIVE DATE:
GROUP LEVEL:
  GROUP ID:          NEW RECEIVER ID:
  EFFECTIVE DATE:          PROD:  N      PRE-PROD:  N
TRANSACTION LEVEL:
  TRANSACTION SET:          ACTIVATE/DEACTIVATE:          OVERDUE AFTER:          HRS
  EFFECTIVE DATE:          PROD:  N      PRE-PROD:  N
  ADD TRANS ID:          VERS:          OVERDUE:          MODEM:
  GS PART ID:          EFFECT DATE:          PROD:  N      PRE-PROD:  N
DATA SEPARATION:
  FILE ID:    IBM          DIR:  0  EFFECT DATE:    102998  PROD:  Y      PRE-PROD:  Y
TRANSACTION MIGRATE:
  TRANSACTION SET:    ■          SYSTEM (P/T):          EFFECTIVE DATE:
3=MNU 4=CRTE VERS 5=UPD/RMV VERS 7=UPD/RMV OTH 8=XREF 9=PRF 10=UPD/RMV PRF
```





## Batch Partner Maintenance

```
M140316A          (CREATE) OTHER PARTNER MAINTENANCE          08/06/98
                                                           07:59:00
PART/COMM ID:    KELR KELR001          QUAL:  ZZ          KELLERLADDERSINC          SANFORDK
INTERCHANGE LEVEL/BG ENVELOPE:
  NEW UCS RECEIVER ID:
  EFFECTIVE DATE:
  NEW UCS COMM PASSWORD:
  EFFECTIVE DATE:
GROUP LEVEL:
  GROUP ID:          NEW RECEIVER ID:
  EFFECTIVE DATE:          PROD:  N          PRE-PROD:  N
TRANSACTION LEVEL:
  TRANSACTION SET:          ACTIVATE/DEACTIVATE:          OVERDUE AFTER:          HRS
  EFFECTIVE DATE:          PROD:  N          PRE-PROD:  N
  ADD TRANS ID:          VERS:          OVERDUE:          MODEM:
  GS PART ID:          EFFECT DATE:          PROD:  N          PRE-PROD:  N
DATA SEPARATION:
  FILE ID:          DIR:          EFFECT DATE:          PROD:  N          PRE-PROD:  N
TRANSACTION MIGRATE:
  TRANSACTION SET:    810          SYSTEM (P/T):  T          EFFECTIVE DATE:  110198
3=MNU 4=CRTE VERS 5=UPD/RMV VERS 7=UPD/RMV OTH 8=XREF 9=PRF 10=UPD/RMV PRF
```

copyrighted by Meijer, Inc.



## Batch Partner Maintenance

```
M140382A          CREATE PARTNER PROFILE MAINTENANCE          08/06/98
                                                           08:21:46
PART/COMM ID:    825159PGCF          QUAL:  08          PROCTER&GAMBLE08          SANFORDK
ADDRESS:        303 INTERNATIONAL CIRCLE
CITY:          HUNT VALLEY          STATE:  MD          ZIP:  21030
CONTACT PHONE:  800-325-8113  EXT 5873
CONTACT NAME:   ELLIE KENT
INTERCONNECT NETWORK:  STERLING
EFFECTIVE DATE: 120198

3=MNU 4=CRTE VERS 5=UPD/RMV VERS 6=OTHER 7=UPD/RMV OTHER 8=XRF 10=U/R PROF
```

copyrighted by Meijer, Inc.



## Batch Partner Maintenance

```
M140383A          UPDATE/REMOVE PARTNER PROFILE MAINTENANCE          08/06/9
                                                                08:25:5
NEXT PARTNER:          SANFORD

PART/COMM ID:    925159PGCF          QUAL:  08    PROCTER&GAMBLE08

ACTION:  I  ADDRESS:

ACTION:  I  CITY:

ACTION:  I  STATE:          ACTION:  I  ZIP:

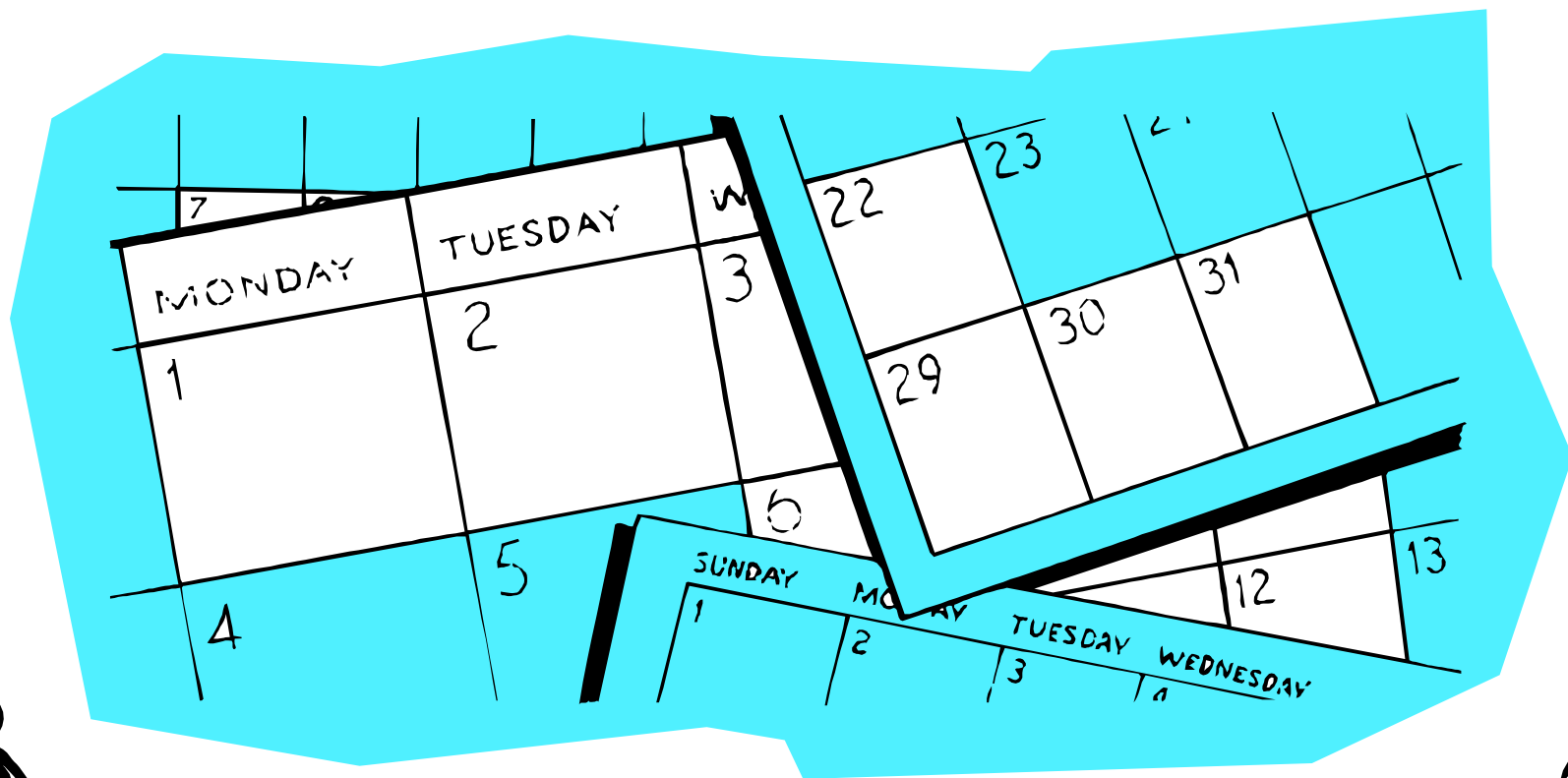
ACTION:  I  CONTACT PHONE:

ACTION:  I  CONTACT NAME:    JOE SMITH          SANFORD
                                ■

ACTION:  I  INTERCONNECT:

EFFECTIVE DATE:    120198
```

## APPLY BATCH PARTNER MAINTENANCE ON EFFECTIVE DATE



## Batch Partner Maintenance Job

- **Export DI Profiles & Usages (EDIFFUT)**

- Perform Export Where CTLFILE (EXIMCTL)

- 7PTPPROF

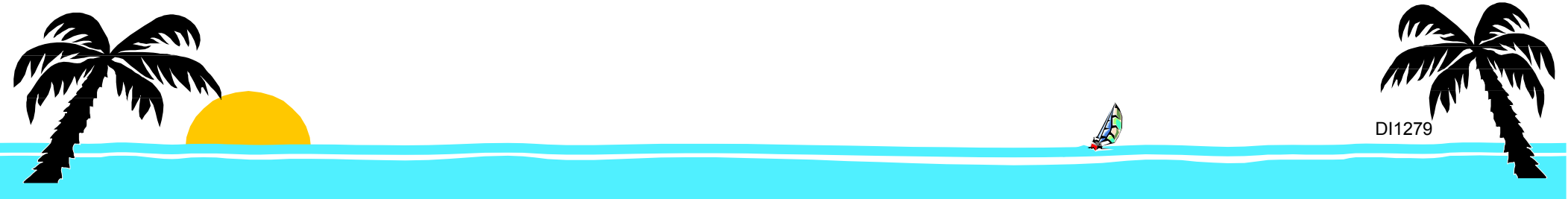
3 T214A320T1      1000000000000000

3 T214A330T1      1000000000000000

...

3 T214A370T1      1000000000000000

3 T810V310T1      1000000000000000



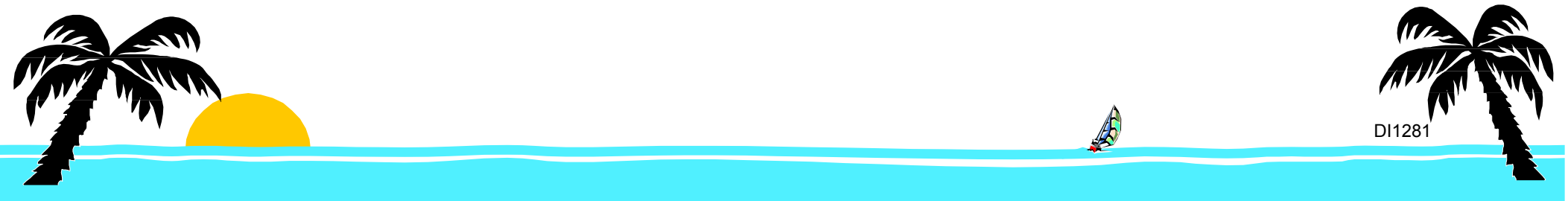
## Batch Partner Maintenance Job

- **De-tag Exported DI Records; Write Fixed Format Records**
  - Identify Profile Fields From Tag Names:  
TPNICKN NETID ACCTID USERID  
INTQUAL INTID CONAME ...
  - Identify Send/Receive Usage Fields From Tags:  
APSNDRCV ACTIVE VER REL ...



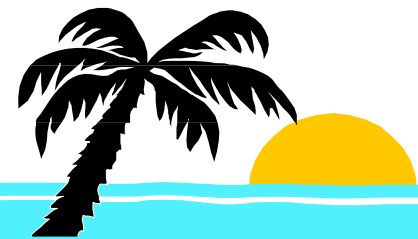
## Batch Partner Maintenance Job

- Sort the 3T5 (send) and 3T6 (receive) usages by partner id, transaction id
- Eliminate Profiles and Usages Without Pending Partner Maintenance
- Update Meijer Partner File Overdue Functional Acknowledgement Hours



## Batch Partner Maintenance Job

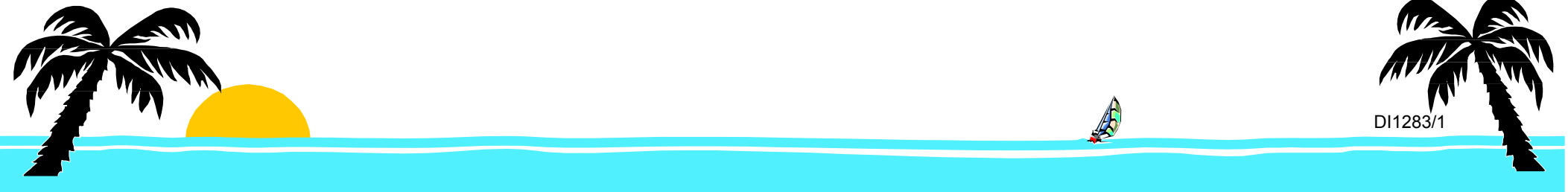
- **Apply Batch Partner Maintenance On Effective Date:**
  - **Batch DI Maintenance Transactions**
  - **Table of Default Transaction Values**  
transaction id, data format id, test, application file,  
version, release, activate, validation level, acceptance  
error level, envelope type, envelope profile...





## Batch Partner Maintenance Job

- **Tag DI Records Prior To Import**  
TPNICKN      NETID      ACCTID ...
- **Import DI Profiles (EDIFFUT)**
  - Perform Import Where CTLFILE (EXIMCTL)  
71
- **Import DI Usages (EDIFFUT)**
  - Perform Import Where CTLFILE (EXIMCTL)  
31



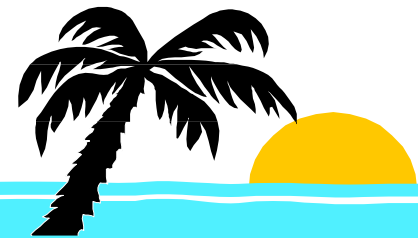


# BUILD EDI PARTNER FILE



## Business Need For EDI Partner File

- Gives your internal applications access for editing or reporting EDI partner information
- A sampling of EDI partner file data we use:
  - Nickname, partner id & qualifier
  - Partner contact and address
  - Transaction, partner id, nickname, EDI version
  - Network



## Meijer EDI Partner File Build Job

- **Export DI Profiles & Usages (EDIFFUT)**

- Perform Export Where CTLFILE (EXIMCTL)

- 7PTPPROF

3 T214A320T1      1000000000000000

3 T214A330T1      1000000000000000

...

3 T214A370T1      1000000000000000

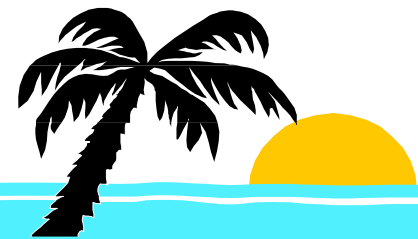
3 T810V310T1      1000000000000000

....



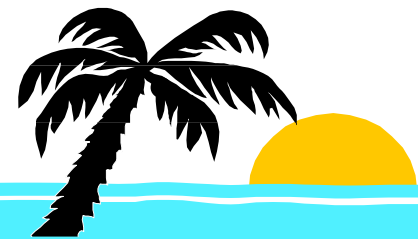
## Meijer EDI Partner File Build Job

- **De-tag Exported DI Records; Write Fixed Format Records**
  - Identify Profile Fields From Tag Names:  
TPNICKN NETID ACCTID USERID  
INTQUAL INTID CONAME ...
  - Identify Send/Receive Usage Fields From Tags:  
APSNDRCV ACTIVE VER REL ...



## Meijer EDI Partner File Build Job

- Sort the 3T5 (send) and 3T6 (receive) usages by partner id, transaction id
- Extract DI Partner and Transaction Data and Meijer EDI Variable Overdue Hours
- Rebuild Meijer EDI Partner Files



## Batch Partner Maintenance Overview

ENTER BATCH  
PARTNER  
MAINTENANCE  
BY EFFECTIVE DATE

EXPORT DI  
PROFILES  
& USAGES

APPLY BATCH  
PARTNER  
MAINTENANCE  
ON EFFECTIVE DATE

IMPORT DI  
PROFILES  
& USAGES

BUILD MEIJER  
PARTNER FILE

EXPORT DI  
PROFILES  
& USAGES



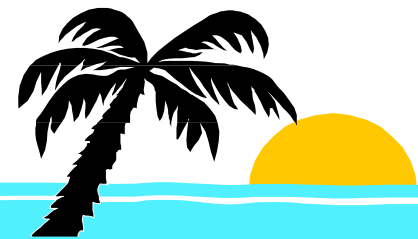
# AUTO MONITORING



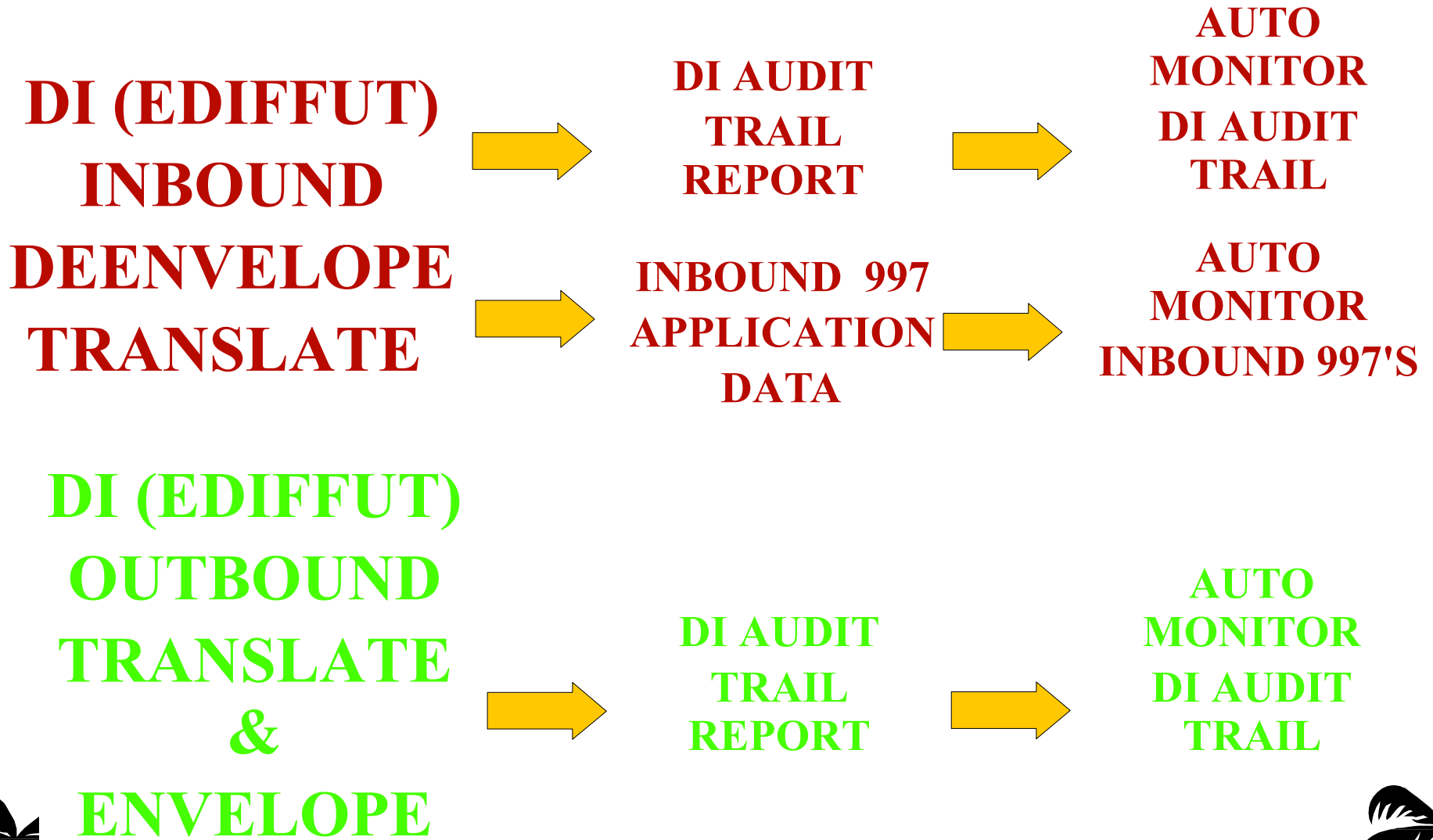


## Business Need For Auto Monitoring

- **Resource savings because there is no need to monitor the EDI Audit Trail or Inbound Functional Acknowledgements (997)**
- **Automatically notify impacted EDI Business area, immediately, when there is an EDI translation error or when an Inbound Functional Acknowledgement has rejected transactions**



## Auto Monitoring Overview



## AUTO MONITORING DI AUDIT TRAIL

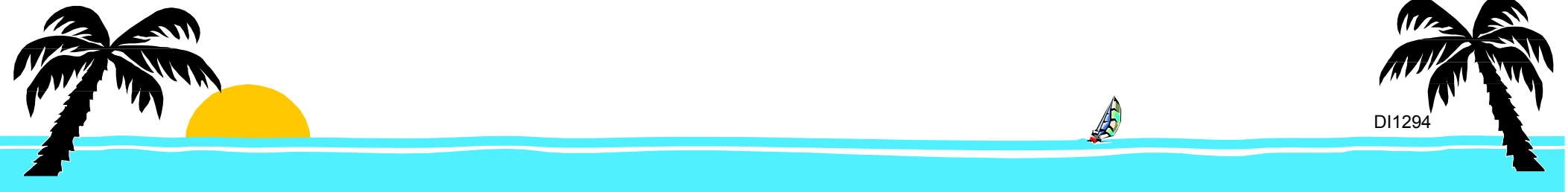


## Auto Monitoring DI Audit Trail

- **EDIFFUT (EDI Map/Translate)**

**Message: TR0150 Severity: 08**

**Functional group header is missing or invalid. Trading Partner ID = HANDYCORPORATION. Interchange control number = 000000002. Last group control number = 000000002 Current record number = 20207. Test indicator = PRODUCTION.**



## Auto Monitoring DI Audit Trail

- Our program reads the DI Audit Trail Message and determines process based on the DI error message
- DI error message number is looked up to determine process:

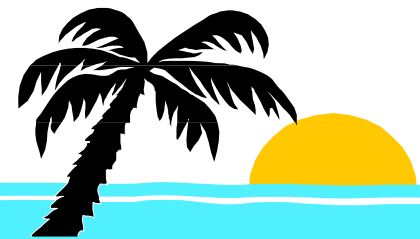
...

TR0848 A

TR0849 E

TR0850 B

TS0500 N



## Auto Monitoring DI Audit Trail

- **Determine Auto Monitoring Process:**

- when 'A' abend program
- when 'B' notify Business EDI Contact
- when 'E' notify ITS EDI
- when 'N' notification not needed

- **Determine EDI Business Contact:**

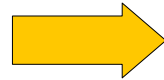
EDI	EDIDSK	Y
214 A214V000T1	EDI	Y
810 A810V000T1	EDI	Y
832 APPLSC00T1	BHAGWATP SANFORDK	Y

- **Pass EDI Error Message and Contact(s) to our E-mail Program so an E-Mail Message will be sent**



## Auto Monitoring DI Audit Trail Overview

**DI (EDIFFUT)  
INBOUND  
DEENVELOPE  
TRANSLATE**



**DI AUDIT  
TRAIL REPORT**



**AUTO MONITOR  
DI AUDIT TRAIL**

**DI (EDIFFUT)  
OUTBOUND  
TRANSLATE &  
ENVELOPE**



**DI AUDIT  
TRAIL REPORT**



**AUTO MONITOR  
DI AUDIT TRAIL**



## **AUTO MONITORING INBOUND FUNCTIONAL ACKNOWLEDGEMENTS**





## Auto Monitoring Inbound 997's

- EDIFFUT (EDI Map/Translate)
- Our program reads the 997 application data records mapped in EDIFFUT. If number of transactions sent does not equal the number of transactions accepted the EDI Business Contact is notified.

- Determine EDI Business Contact:

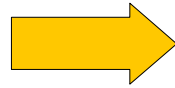
EDI	EDIDSK	Y
832 APPLSC00T1	BHAGWATP SANFORDK	Y

- Pass EDI Error Message and Contact(s) to our E-mail Program so an E-Mail Message will be sent



## Auto Monitoring Inbound 997 Overview

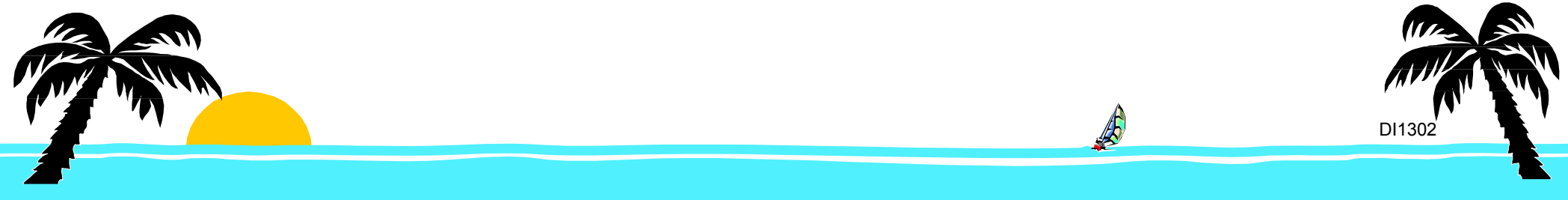
DI (EDIFFUT)  
OUTBOUND  
TRANSLATE &  
ENVELOPE



INBOUND 997  
APPLICATION  
DATA

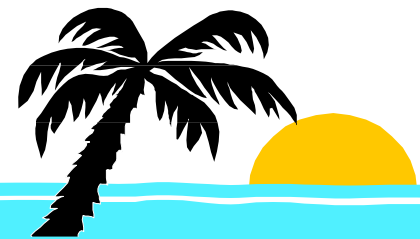


AUTO MONITOR  
INBOUND 997'S



## Conclusions

- **Integrating Batch Partner Maintenance and Auto Monitoring to DI can free resource hours that could be better spent bringing more EDI partners aboard.**
- **Building your own EDI Partner File would allow your current (and future) applications access to EDI partner information.**



# QUESTIONS AND ANSWERS

