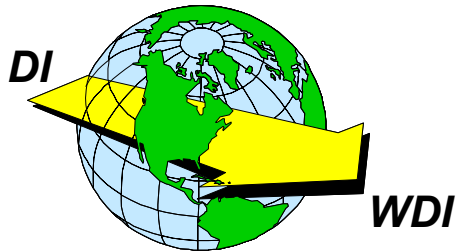


Moving to the DataInterchange Client

Maury Griffith
Connection 2000

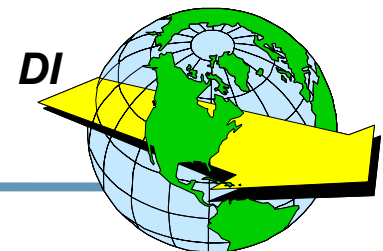
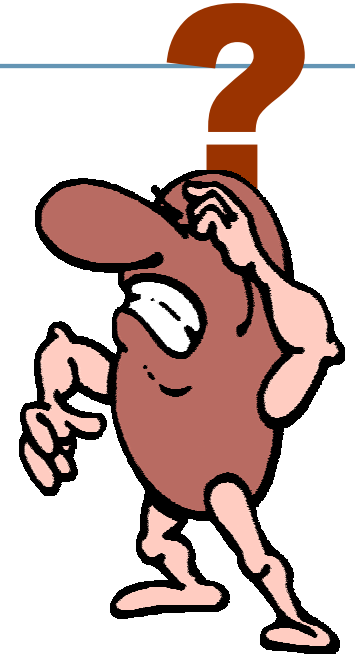
The Next Generation



2002 User Conference

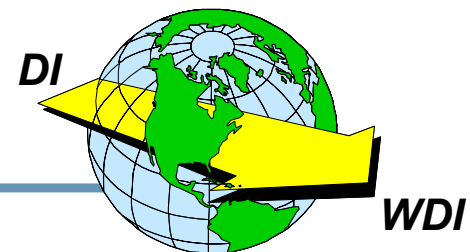
What About the Client?

- ★ Do I need it?
- ★ Do I want it?
- ★ What are the differences between 3.1 and 4.1?
- ★ What does it take to make the move?
- ★ What does it buy me?
- ★ Can I convert my maps?
- ★ What about XML?
- ★ How do I make the move?



Do I Need It?

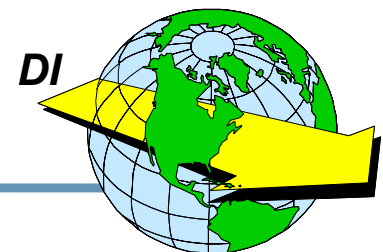
- ★ **Yes!** – If you are converting to DataInterchange 4.1.
- ★ **Yes!** – If you require XML translation.
- ★ **Yes!** – If you plan to use WebSphere Data Interchange.
- ★ **No!** – If you only require traditional EDI translation in the mainframe environment, there is no immediate need to upgrade beyond DI 3.1 (support will eventually be discontinued, however).



DI 4.1 and the Client



Application Data Formats,
Trading Partner Transactions
(Mapping), and Standards are
available *only* in the Client
with DataInterchange 4.1.



MP01

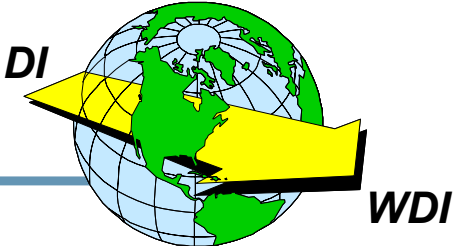
DataInterchange for MVS Version 4.01 Main Menu

5655-G99 (c) Copyright IBM Corp. 1989, 2002
All Rights Reserved. Licensed materials - Property of IBM

Type the number of your choice and press Enter, or press the Exit key to exit. Functions with an * are available on DataInterchange Client.

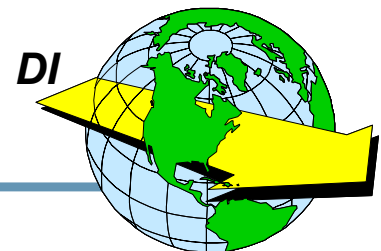
- Choice ==> ~~1. (reserved for future use) -----~~
 2. Profiles
 3. Event Logging
~~4. * Mapping (Trading Partner Transactions) -----~~
~~5. * EDI Standards -----~~
~~6. * Application Data Formats -----~~
 7. Translation and Validation Tables
~~8. * Envelope Standards -----~~
 9. Transaction Store Facility
 10. Export
 11. Import
 12. Utility

Command ==>
Enter Tso F1=Help F3=Exit F9=Retrieve
F13=Keys help



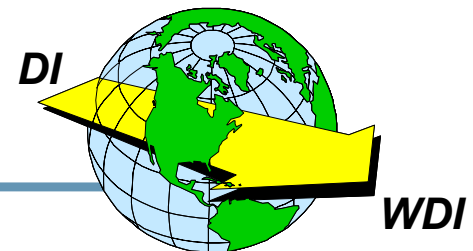
XML and the Client

XML mapping is supported *only* in
the Client with:
DataInterchange 3.1,
DataInterchange 4.1,
or
WebSphere Data Interchange.

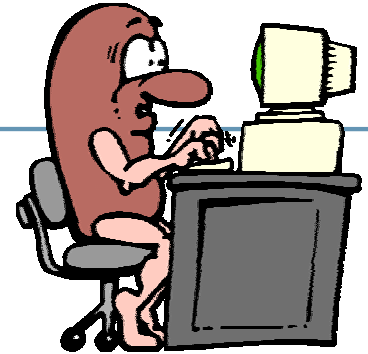


Without the Client

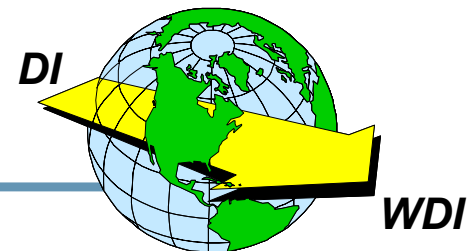
- ★ You will not be able to map XML translations.
- ★ You will not be able to upgrade to DataInterchange 4.1.
- ★ All DataInterchange administrative functions will remain on the mainframe.



Do I Want It?

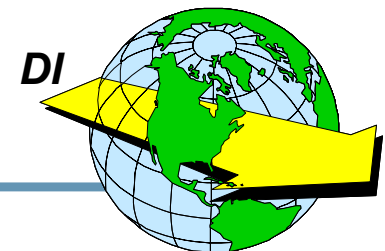


- ★ Am I Windows literate? Am I familiar with Windows conventions, menu bars, button bars, and navigation?
- ★ Do I understand the concept of “Drag and Drop”?
- ★ Would I like to see both data layouts (Dictionaries - EDI, XML, CSV, Raw, or C&D) of the translation displayed on the screen?

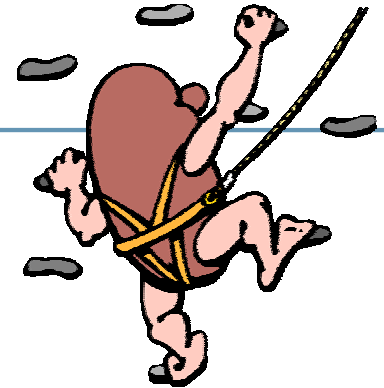


Differences 3.1 vs. 4.1

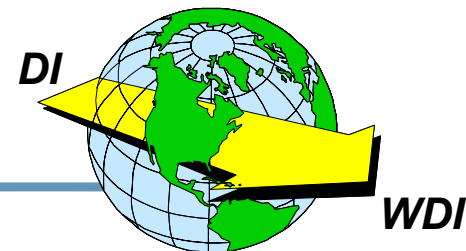
DataInterchange 3.1	DataInterchange 4.1
Translates Application Data to/from XML	Translates XML, CSV, Application Data, EDI
Send/Receive Mapping	Send/Receive and Data Transformation Mapping
Map in Client or Mainframe	Map in Client only
Separate formats for Maps, Data Formats, Standards	Only one format for Maps, Data Formats, Standards (Client only)
Config., Custtime, Runtime databases	Config. and System databases



What Does It Take to Make the Move?



- ★ **Installation of the Client (and appropriate FIXPAKS)**
- ★ **Training on the Client**
- ★ **Communication with the mainframe**
 - **Upload/Download (Stand Alone)**
 - **ODBC (Database Connectivity)**



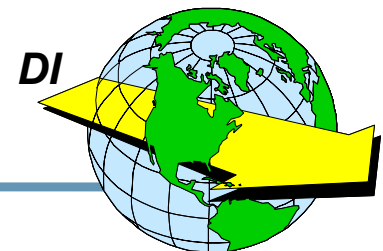
Can I Convert My Maps?

★ DataInterchange 3.1

- Mainframe and Client Maps (and Standards and ADFs) are in different formats.
- The Client provides a Convert action.

★ DataInterchange 4.1

- Installation provides database and map migration. (DI 3.1 maps cannot be automatically migrated to Data Transformation maps however.)
- There is only one database format for Maps, Standards, and ADFs (Data Formats).



What About XML?

★ **FIRST – You NEED the Client!**

★ **DataInterchange 3.1 Client**

- **Maps between Application Data and XML**

★ **DataInterchange 4.1 Client**

- **Maps between any of:**

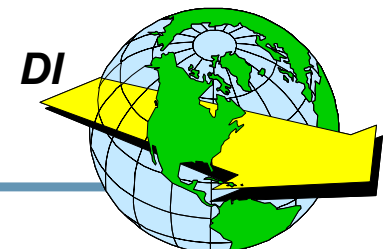
⚡ **Raw Data**

⚡ **XML**

⚡ **C&D Records**

⚡ **EDI Data**

⚡ **Comma Separated Values**



Creating an XML Standard and Dictionary

DTD Conversion Utility - Version 1.00 [X]

DTD File
DTD Name

Root Element Name

Standard Name

Transaction Name

Sender Element

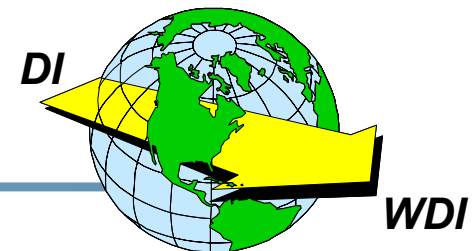
Qualifier

ID

Receiver Element

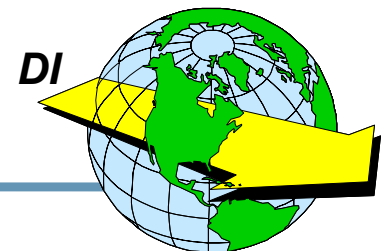
Qualifier

ID



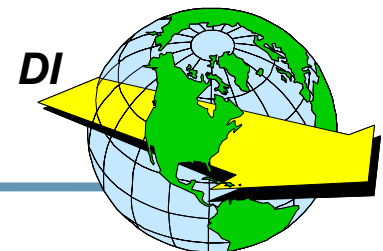
How Do I Make the Move?

1. I am currently using DataInterchange 3.1.
2. I am moving to the Client when we install DataInterchange 4.1.



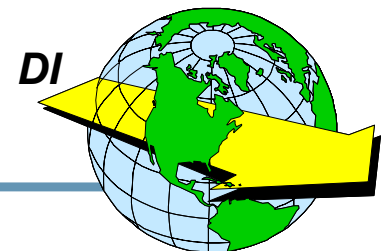
Using DataInterchange 3.1

- ★ Install the Client on your PC.
- ★ Learn it.
- ★ Download and review some mainframe maps.
- ★ Create a Dictionary, Record ID, Data Format and Map.
- ★ Compile the map and upload the control string to the mainframe.
- ★ Create other objects. Try stuff. Play with it!



Installing DataInterchange 4.1

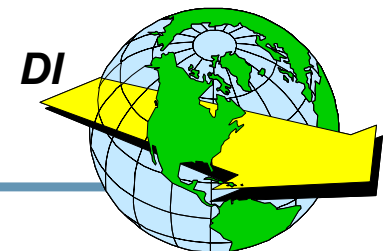
- ★ Before you upgrade to 4.1, if you have the opportunity, install the DI 3.1 Client and get familiar with it.
- ★ Read the manual, take a class, use help, don't expect all of this to be "intuitive."
- ★ Make sure you understand the "Dictionary" concept.
- ★ Work with Send/Receive mapping only, then tackle Data Transformation Maps.
- ★ Review your mainframe Data Formats and Maps that were converted to Client as part of the 4.1 installation.
- ★ Try stuff. Play with it!



Are You Ready?



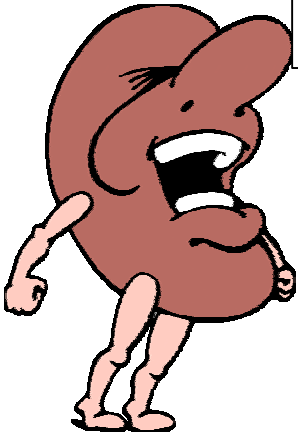
- ★ Do you know the vocabulary of the Client?
- ★ What are your configuration options?
- ★ What concepts are different in the Client?
- ★ How can I use the Client most effectively?
- ★ What is Data Transformation Mapping?
- ★ What are the pros and cons?
- ★ Any final recommendations?



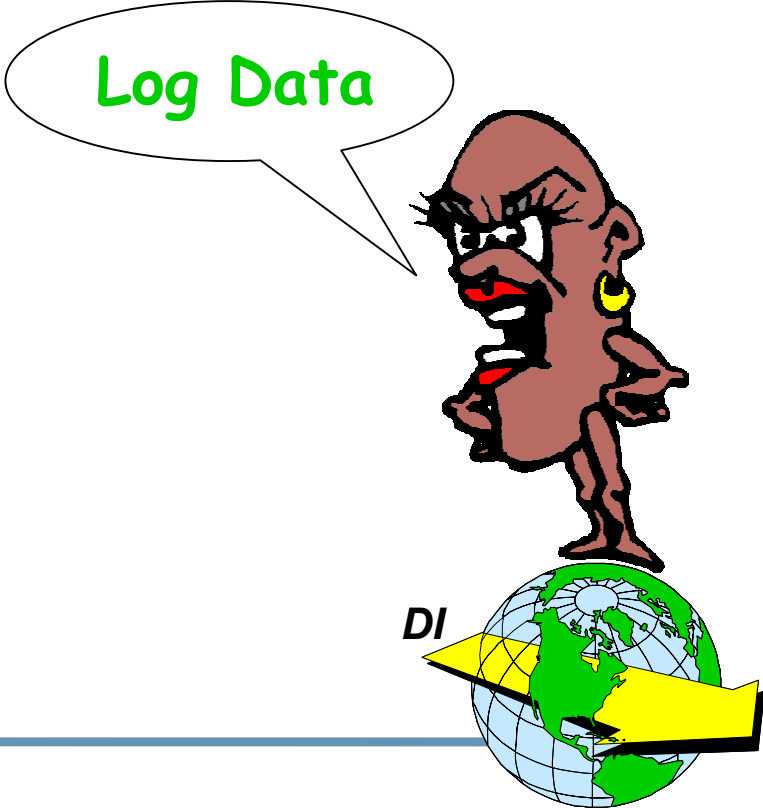
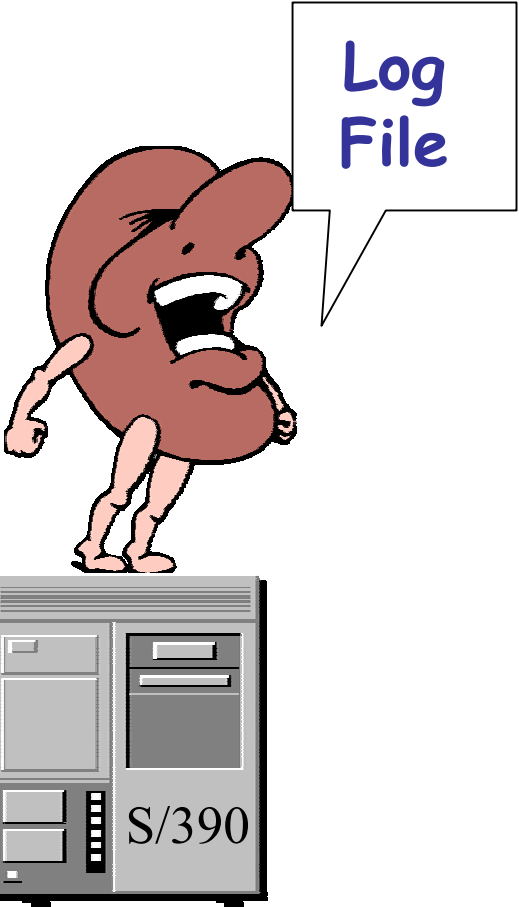
A New Vocabulary

Application
Definition
Profile

Application
Defaults



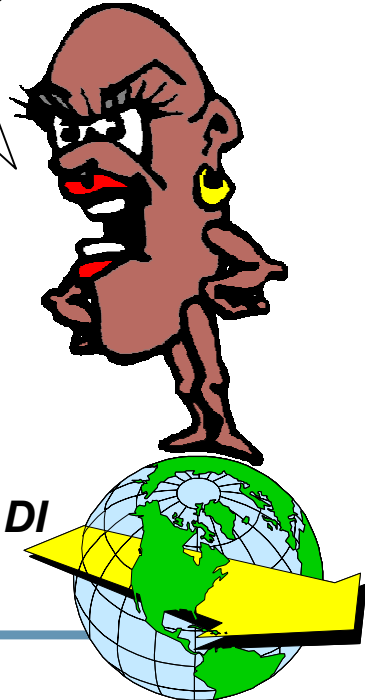
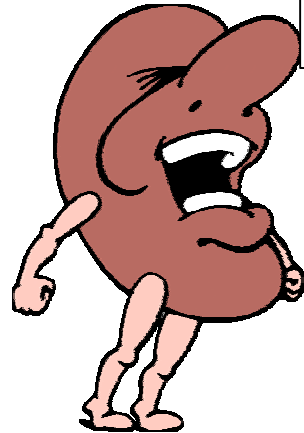
A New Vocabulary



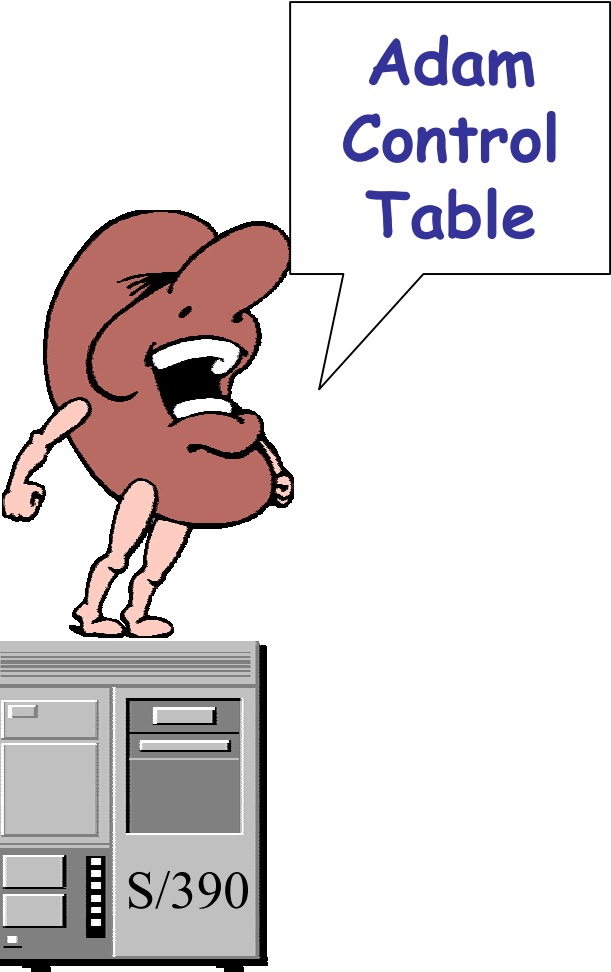
A New Vocabulary

Multiple Occurrence Mapping

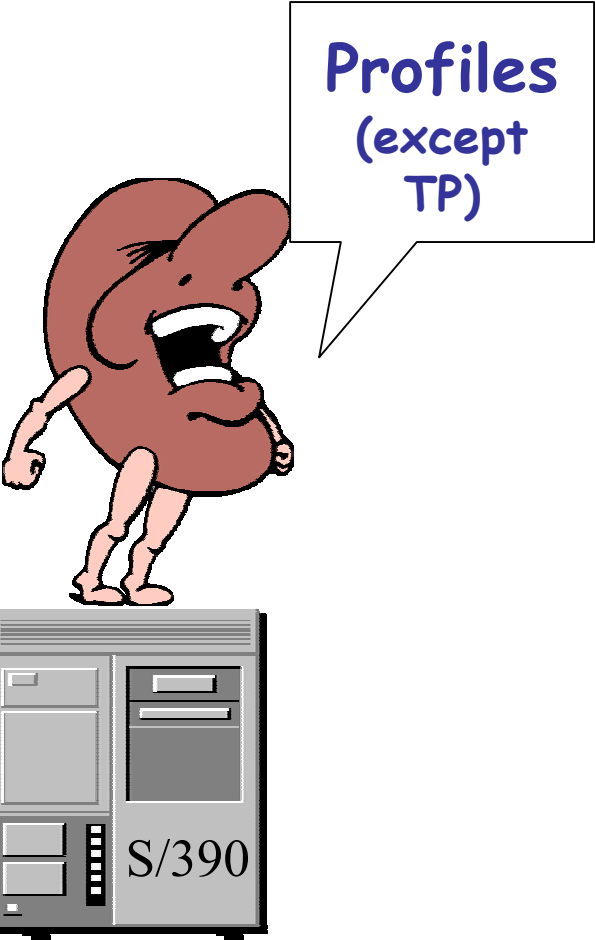
Path Qualified Mapping



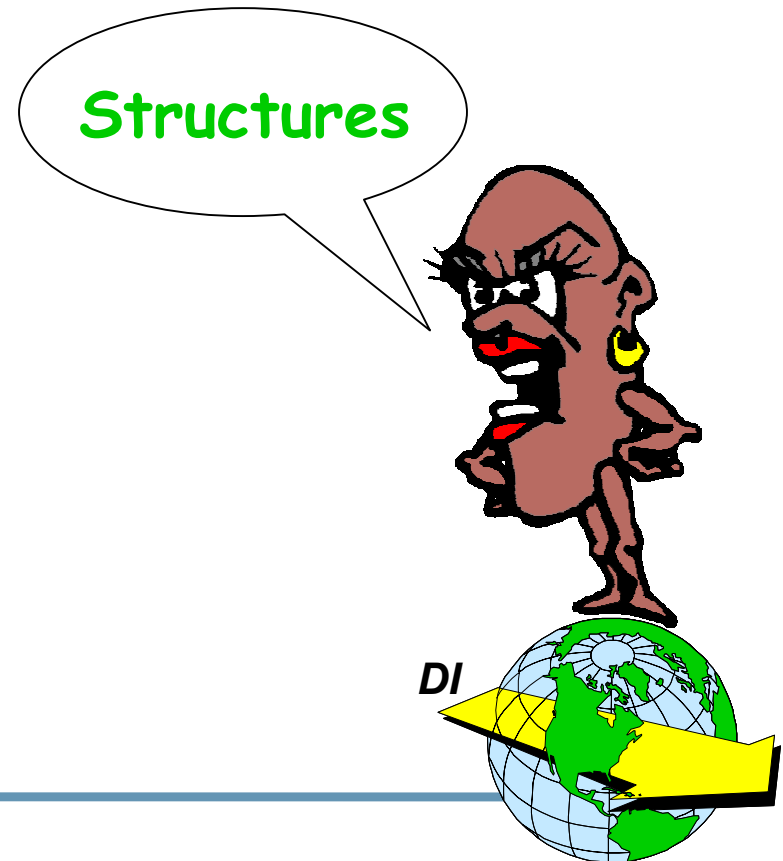
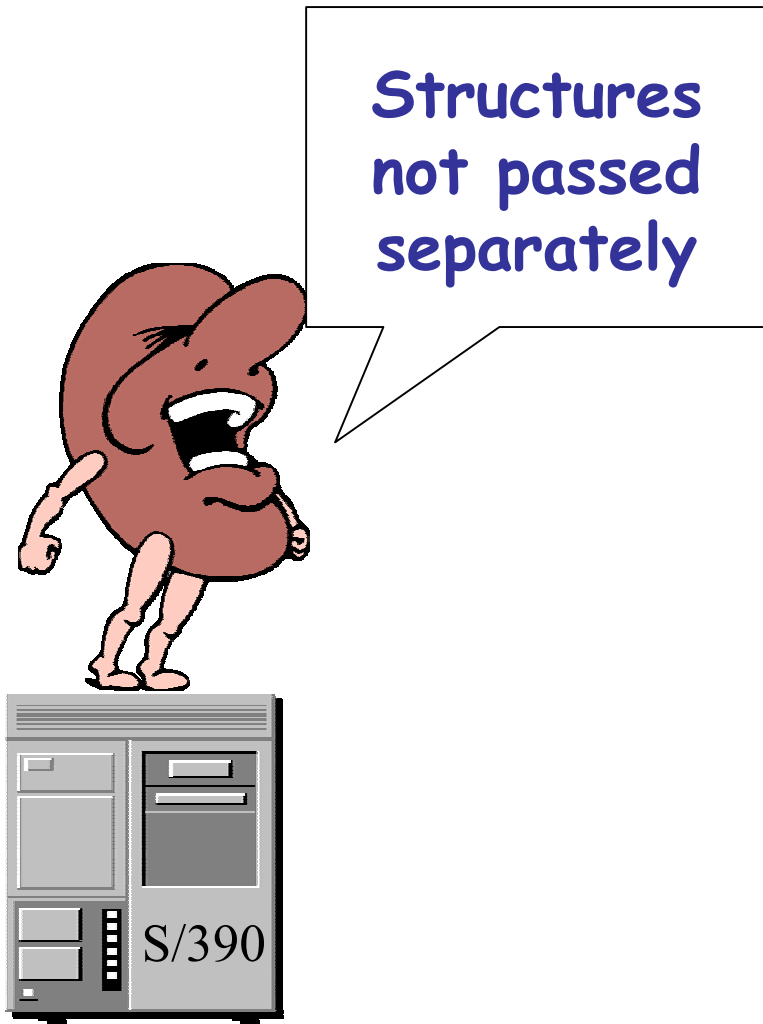
A New Vocabulary



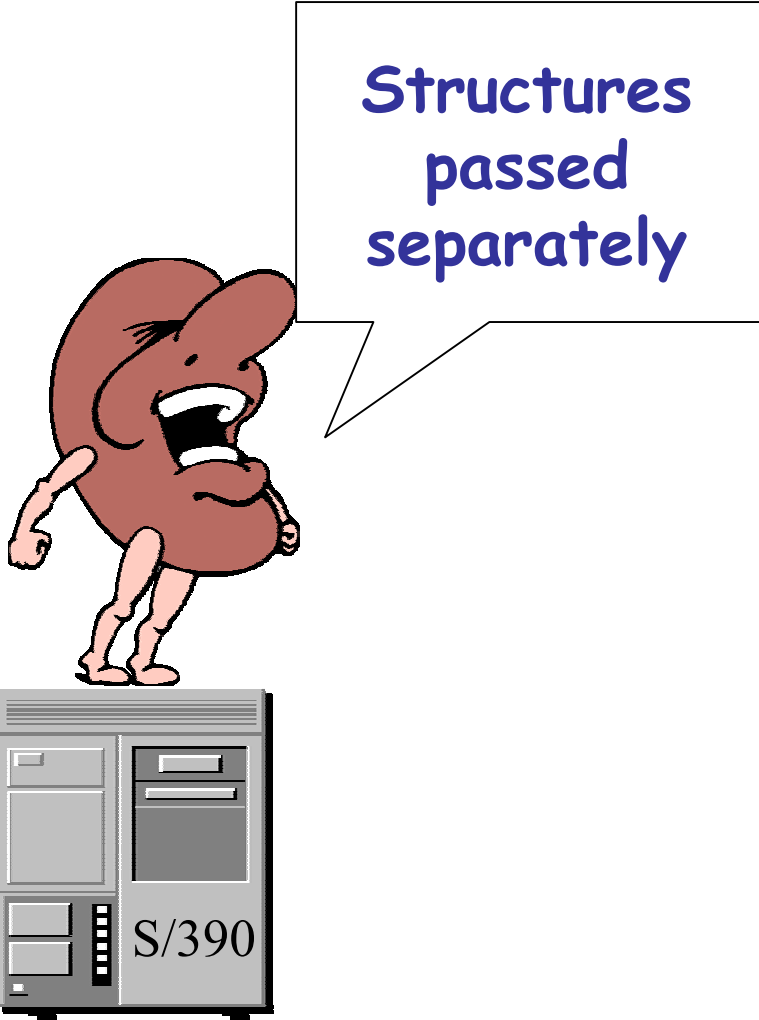
A New Vocabulary



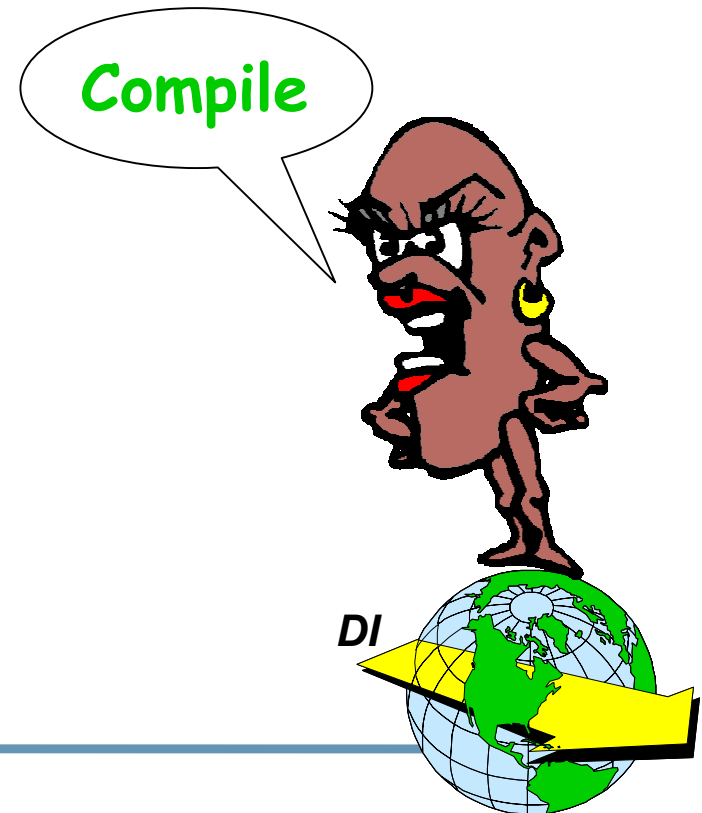
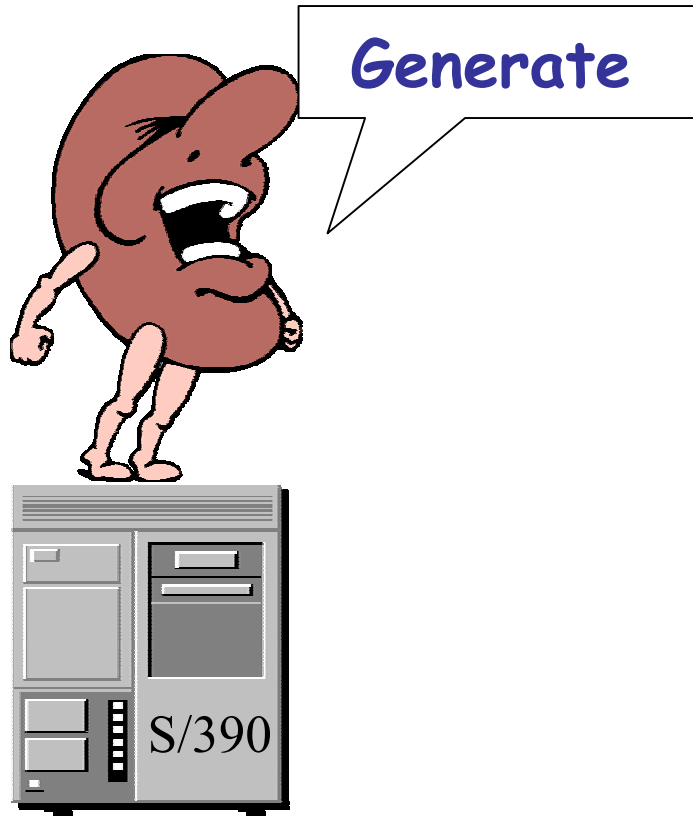
A New Vocabulary



A New Vocabulary



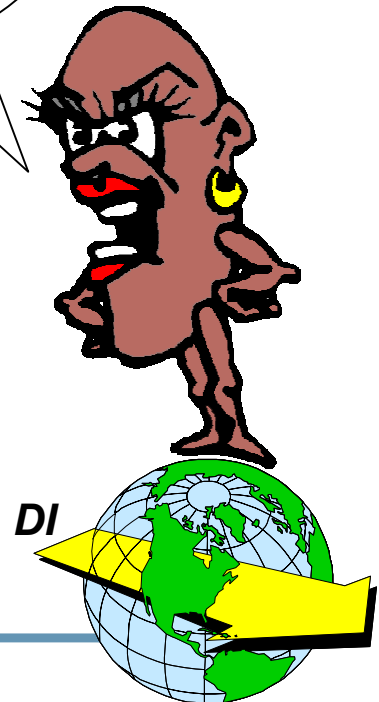
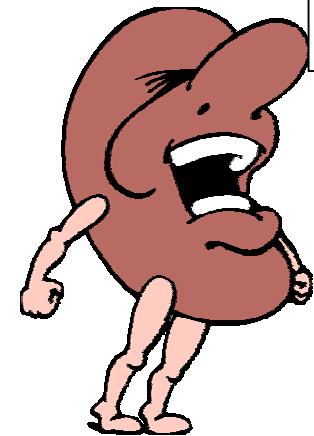
A New Vocabulary



A New Vocabulary

T-Type
Translation
Tables

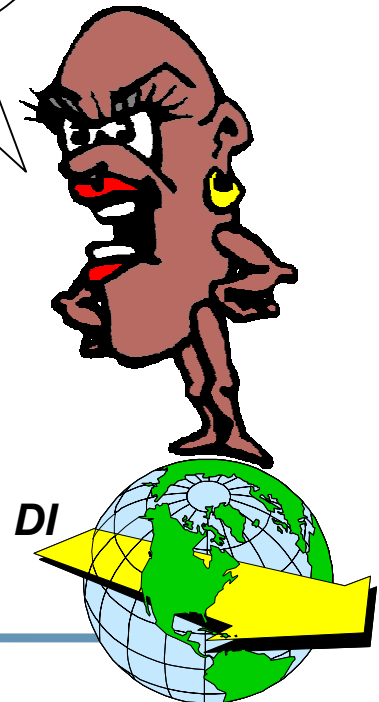
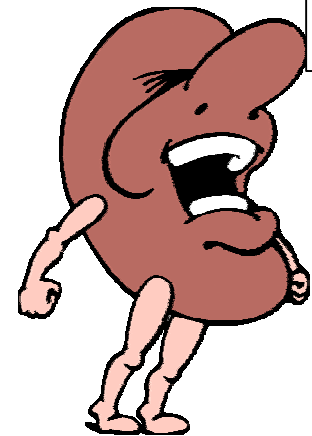
Forward
Translation



A New Vocabulary

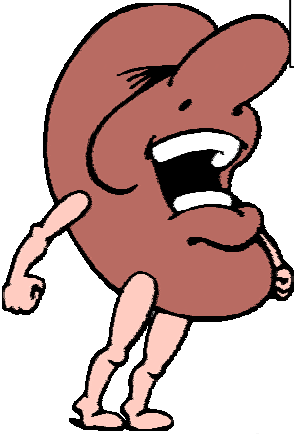
R-Type
Translation
Tables

Reverse
Translation



A New Vocabulary

Trading
Partner
Transactions

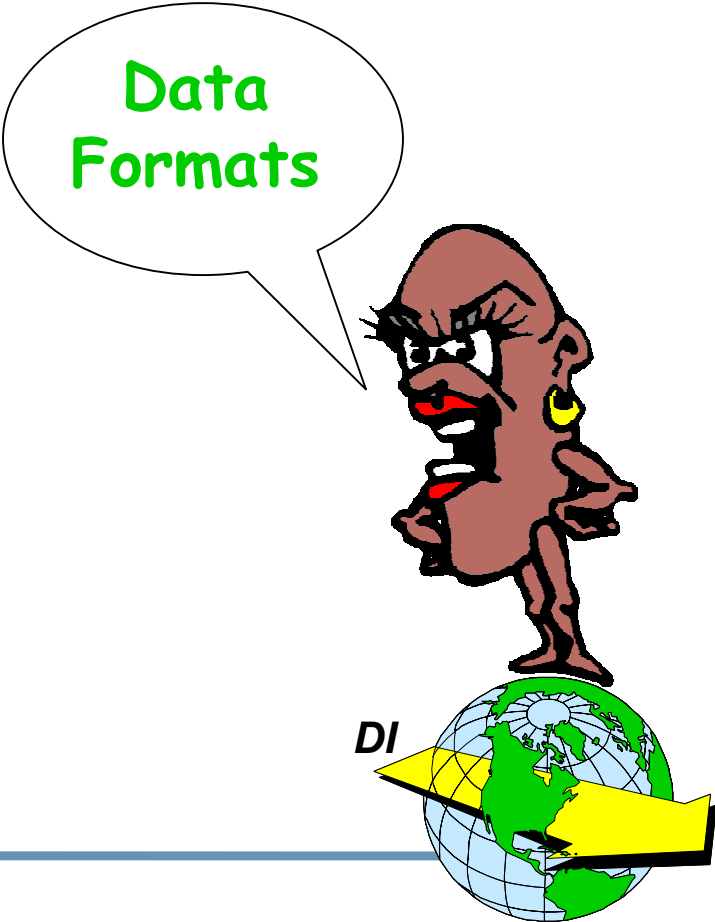
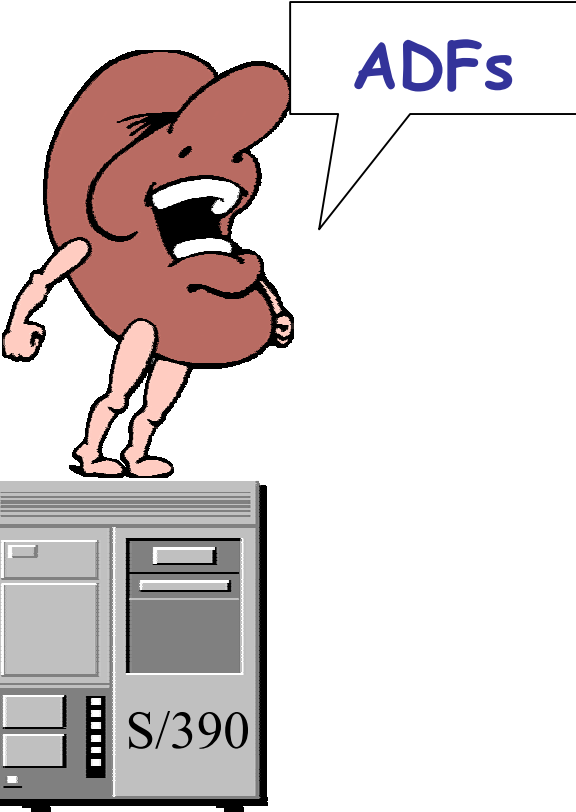


Maps

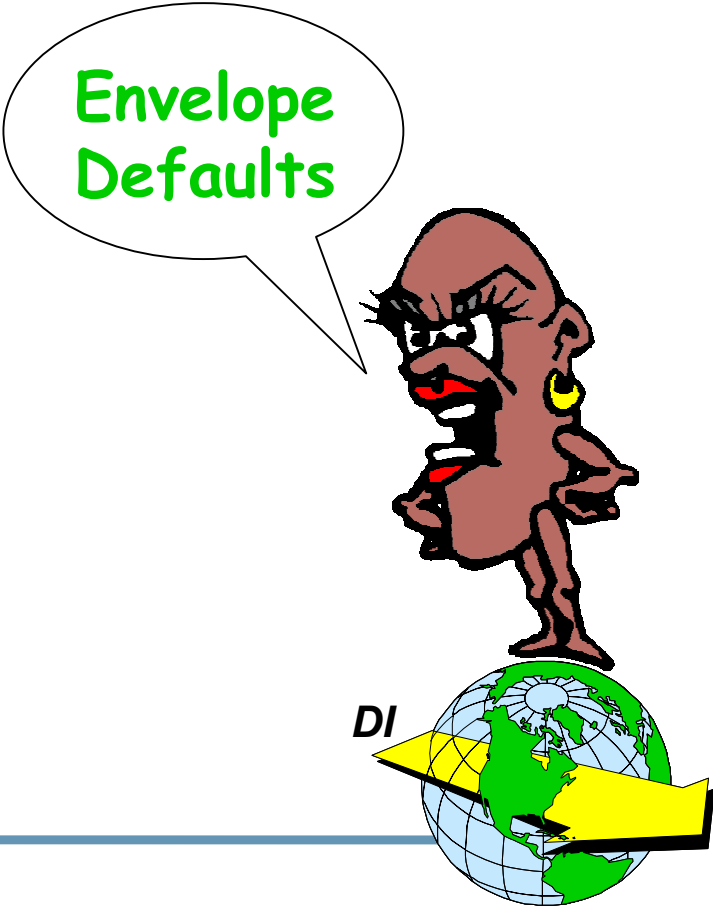
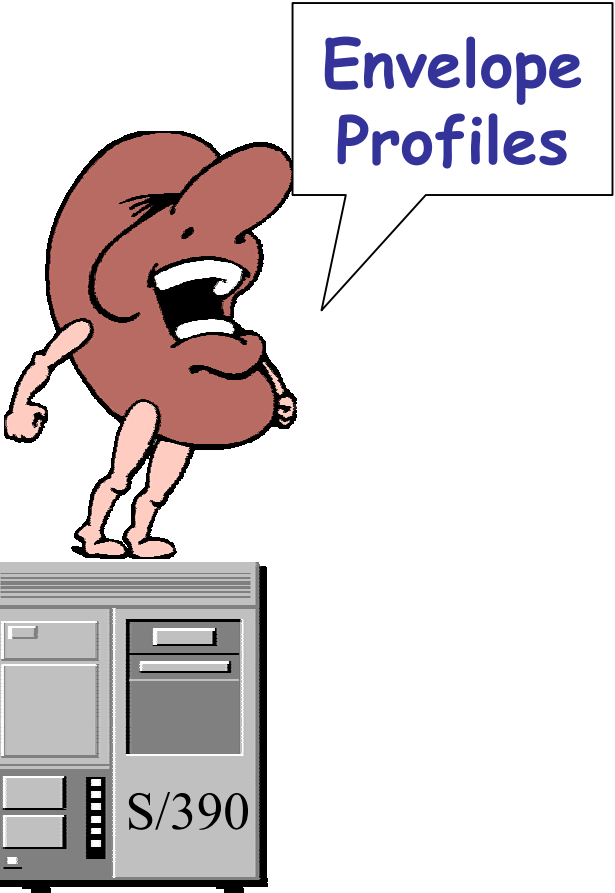


DI

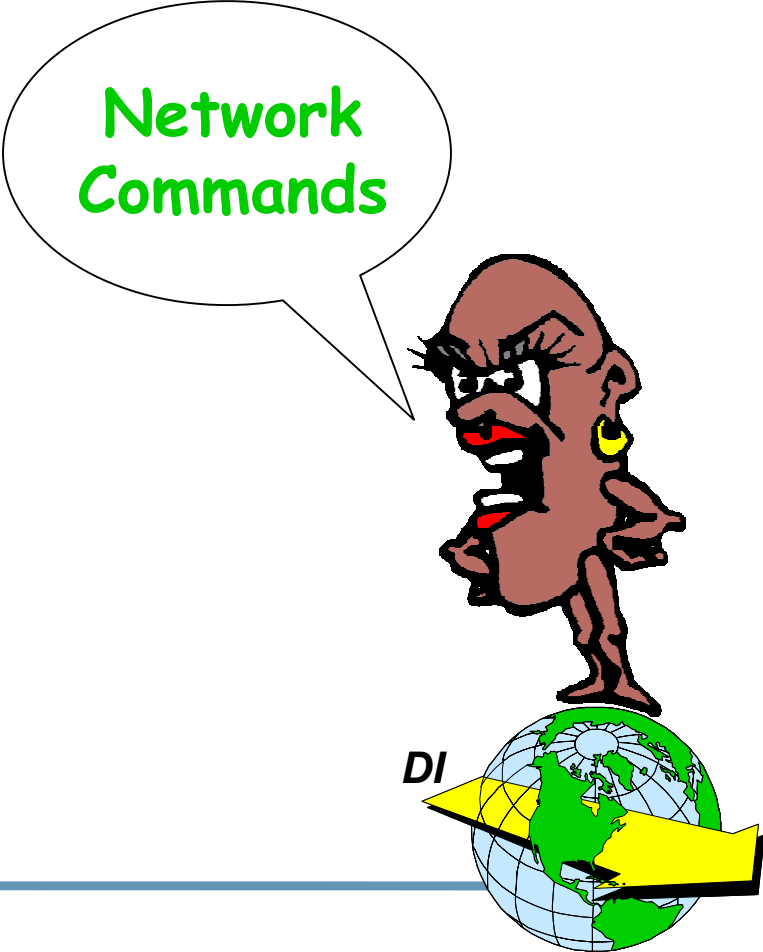
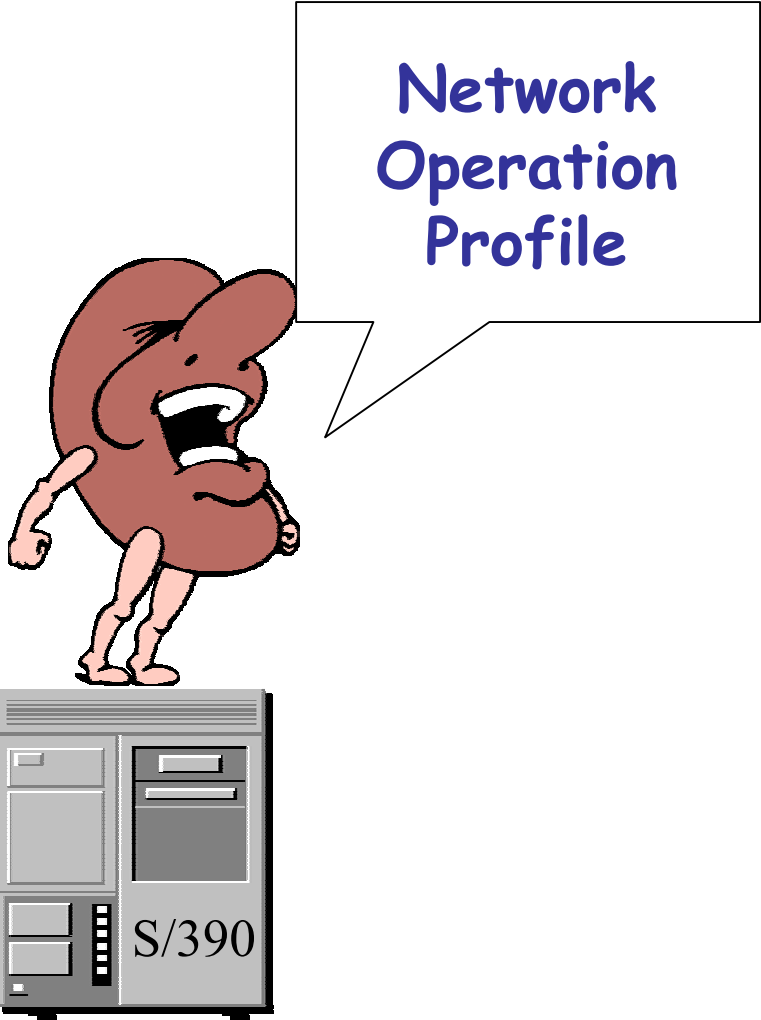
A New Vocabulary



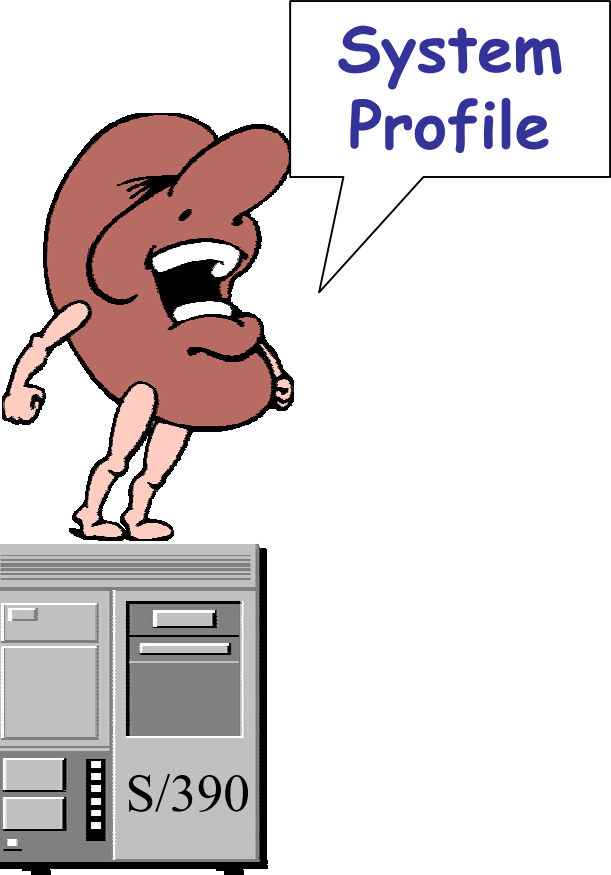
A New Vocabulary



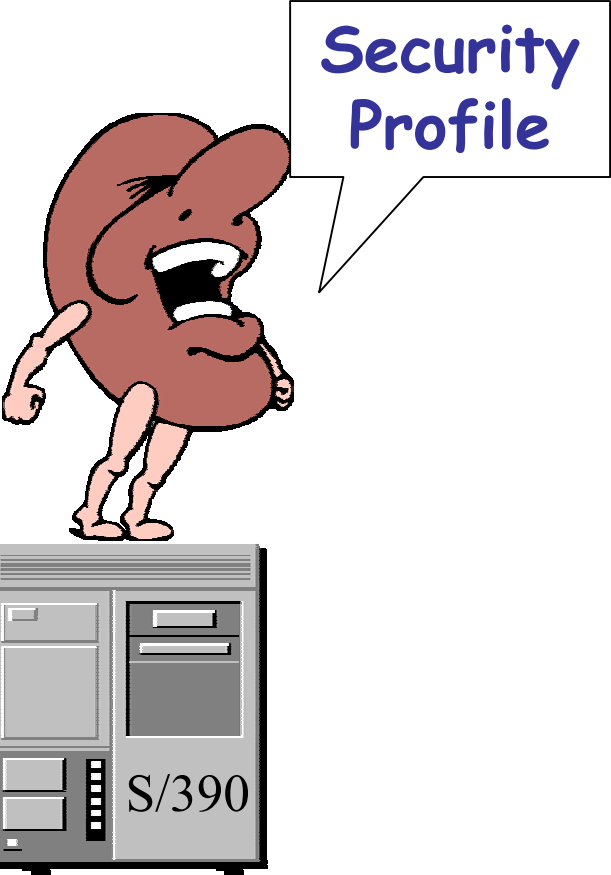
A New Vocabulary



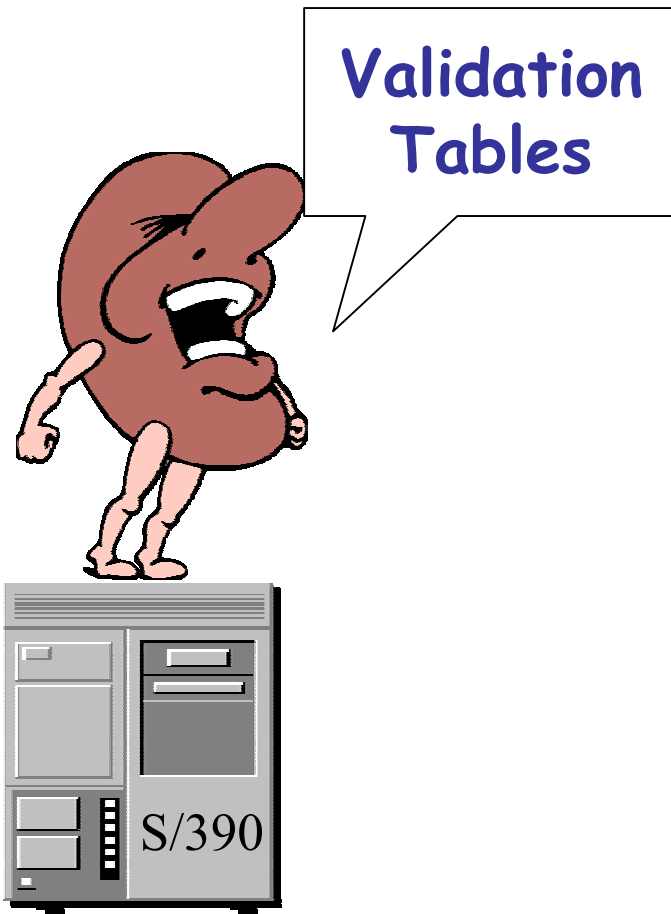
A New Vocabulary



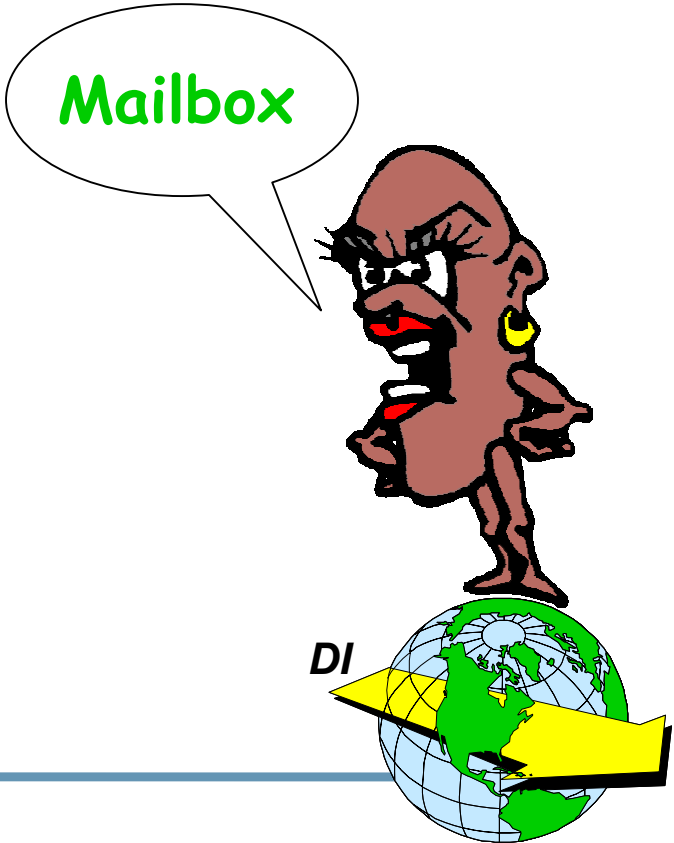
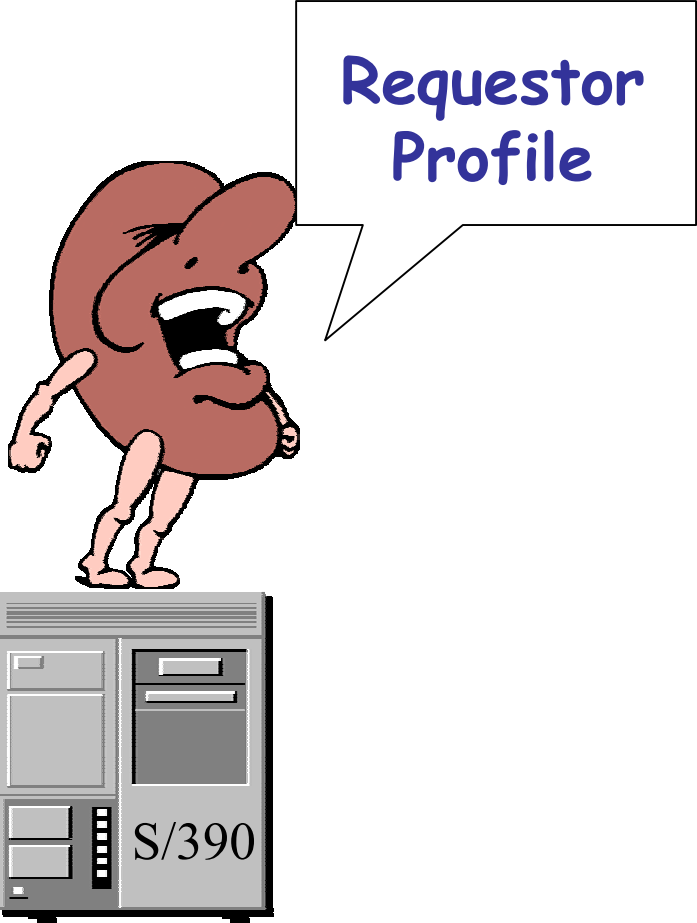
A New Vocabulary



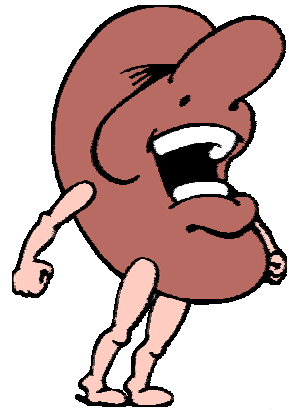
A New Vocabulary



A New Vocabulary

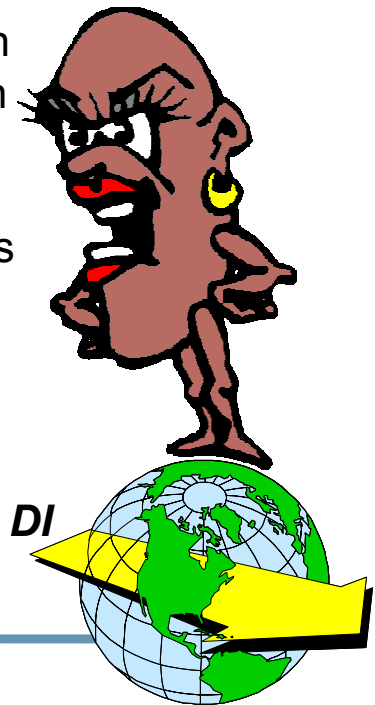


A New Vocabulary



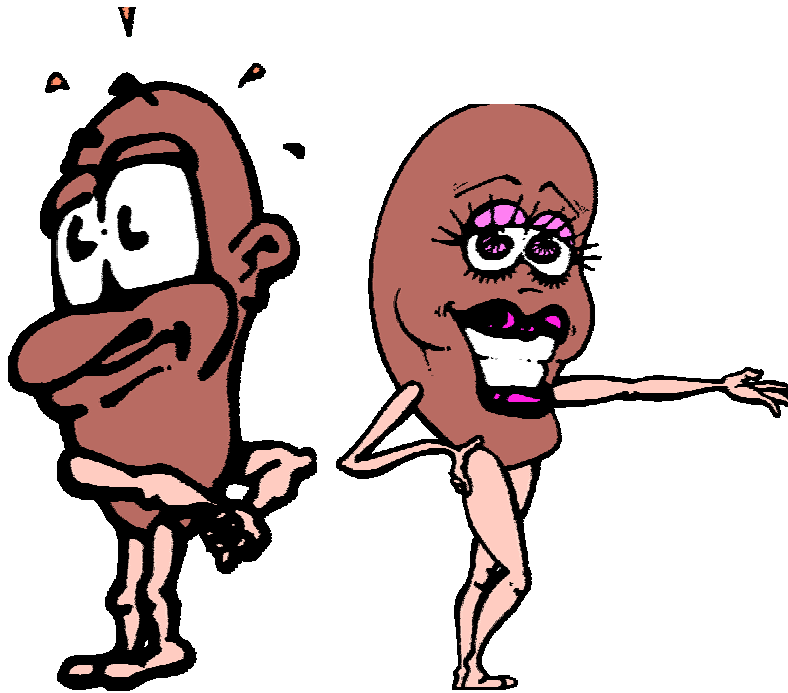
Application Definition Profile
Log File
Multiple Occurrence Mapping
Requestor Profile
ADAM Control Table
Profiles (except Trading Partner)
Structures Not Passed Separately
Structures Passed Separately
Generate
R-Type Translation Table
T-Type Translation Table
Trading Partner Transactions
ADFs
Network Operation Profile
System Profile
Security Profile
Validation Table
Envelope Profiles

Application Defaults
Log Data
Path Qualified Mapping
Mailbox
User Exits
Setup
Structures
Records
Compile
Reverse Translation
Forward Translation
Mapping / Maps
Data Formats
Network Commands
CICS Performance
Network Security
Code List
Envelope Defaults

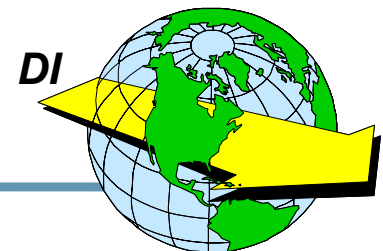
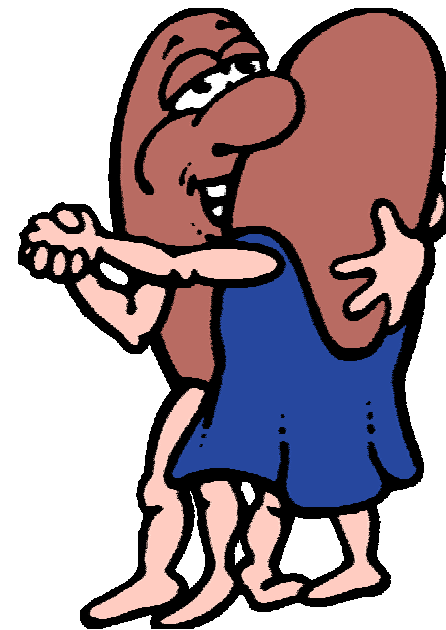


Configuration Options

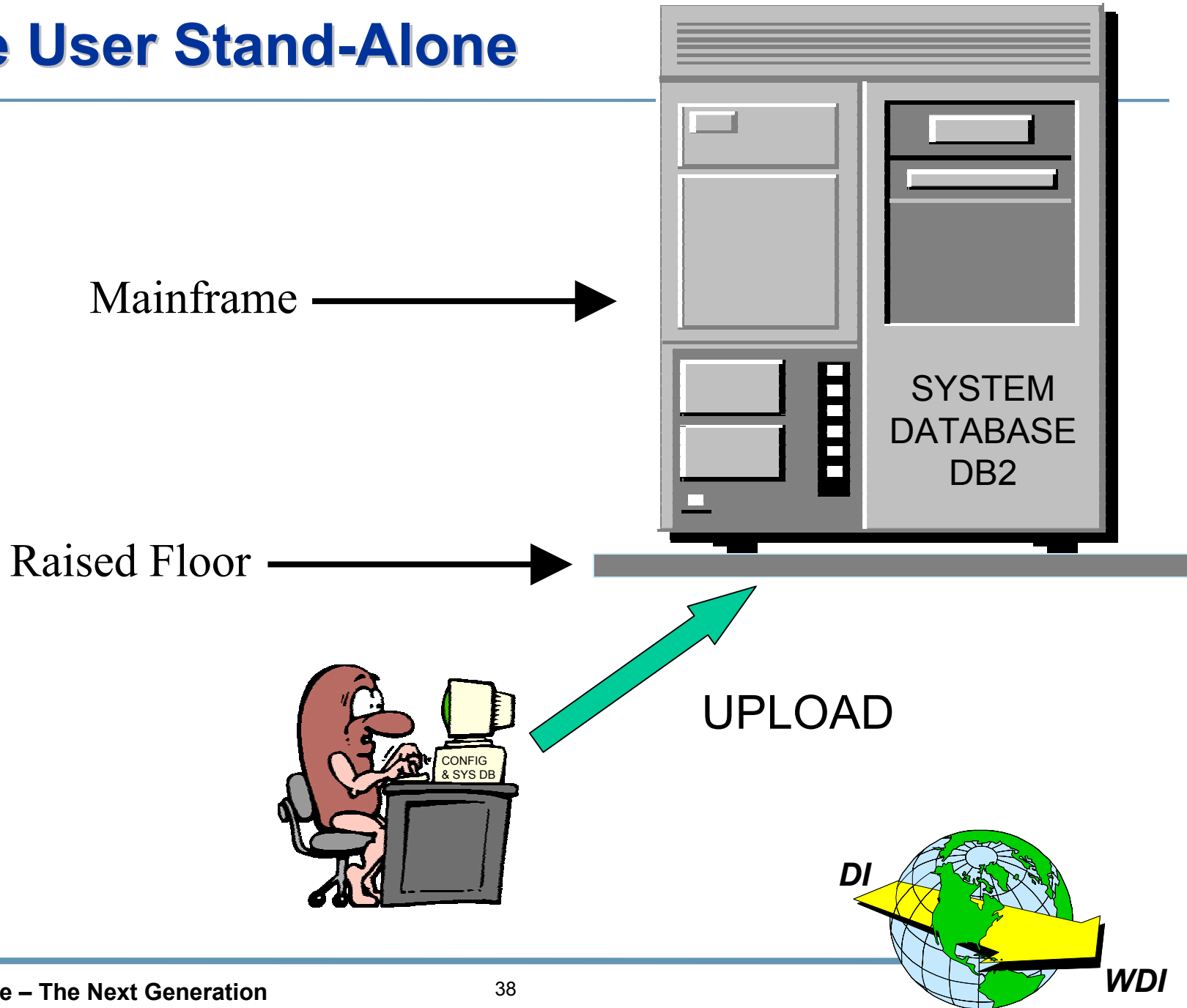
STAND-ALONE



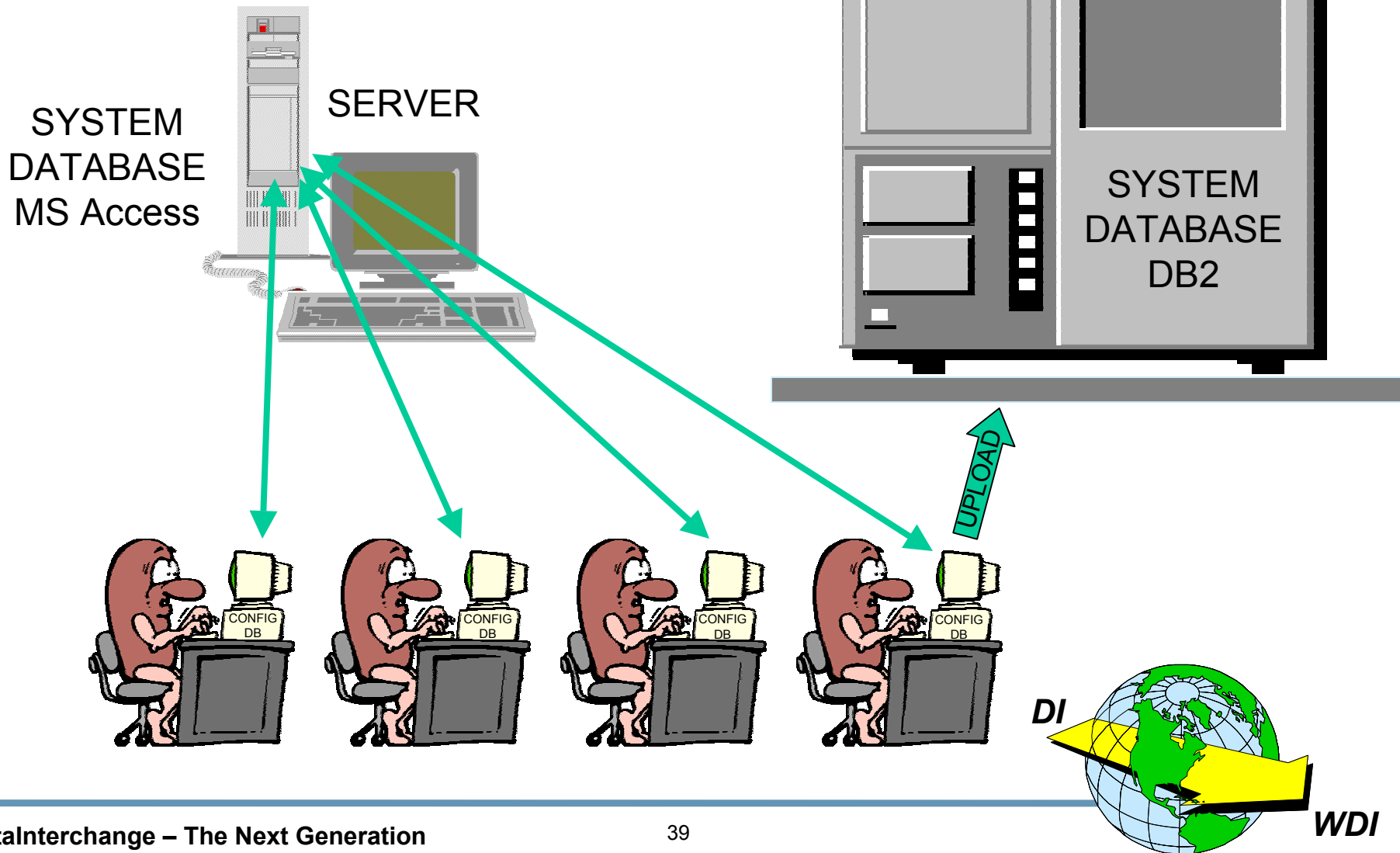
CLIENT/SERVER



Single User Stand-Alone



Multi-User Stand-Alone

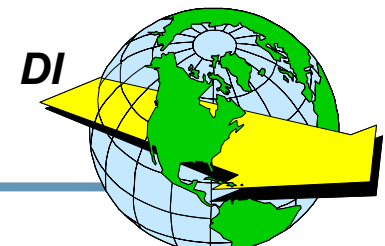
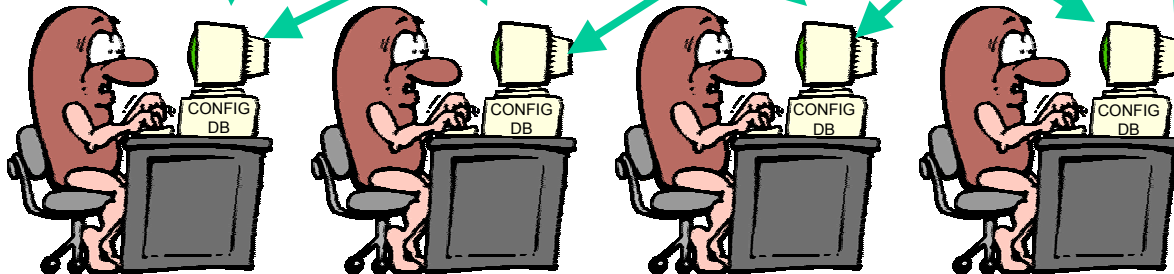


Multi-User Client/Server

SYSTEM
DATABASE
MS Access

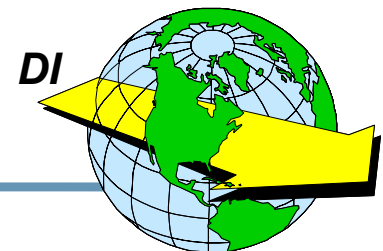
SERVER

SYSTEM
DATABASE
DB2



Client Concepts

- ★ **Mapping, Data Formats, and Standards must be managed on the DataInterchange Client.**
- ★ **Data (Application, EDI, XML) are defined by Dictionaries.**
- ★ **Other administration (Profiles, Usages, Tables, Rules, Code Lists, Transaction Store) may be handled on the Client or the mainframe.**
- ★ **Control Strings must be moved to the mainframe for translation.**
- ★ **Control Strings may be uploaded to the mainframe database or the database may be accessed via middleware and ODBC.**
- ★ **The Client may be shared on a LAN.**



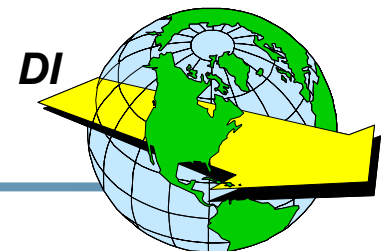
Effective Use of the Client

★ Recommended configuration:

- Multi-User Client/Server
- System database on mainframe with backup on server
- Local (sandbox) system database on workstations

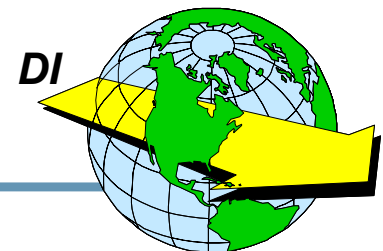
★ Considerations

- Plan for and use Data Format dictionaries
- Establish site naming conventions and change control



Three Types of Maps

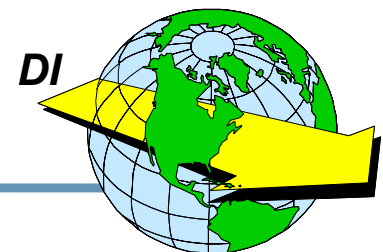
- ★ **Inbound:**
Application ← Standard
Where Application is Raw Data or C&D Records and Standard is EDI or XML
- ★ **Outbound:**
Application → Standard
Where Application is Raw Data or C&D Records and Standard is EDI or XML
- ★ **Data Transformation:**
Source → Target
Where either Source or Target may be any of:
Raw data, C&D Records, CSV, XML, EDI



Inbound/Outbound Mapping

★ Steps for creating a new map:

- Name and describe the map
- Select data format dictionary
- Select the data format
- Select the standard dictionary
- Select the standard transaction
- Confirm the selections
- Map it!



The Client Map

DataInterchange Client 4.1 - [Development - Map - GENERICMAP]

File Actions Edit Navigate View Window Help

System Development ?

General Details Comments

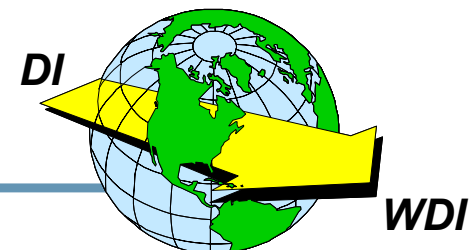
WHAZZIT

- HEADER
 - RECID
 - TP
 - PONUM
 - PO-TYPE
 - ORG-ID
 - ADDRESS
 - CITY
 - STATE
 - POSTAL-CODE
 - COUNTRY
- REFERENCE
 - RECID
 - FFCC

Application Control Fields

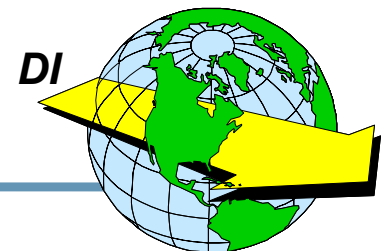
- 850 [Purchase Order]
 - 20 M BEG [Beginning Segment for Purchase Order]
 - 1 M 353 [Transaction Set Purpose Code]
 - 2 M 92 [Purchase Order Type Code]
 - PONUM in HEADER
 - Literal of : &SET VPOCHAR1 &E(VPONUM RD 1)
 - Literal of : &IF (VPOCHAR1 = 'A') RO
 - PO-TYPE in HEADER
 - 3 M 324 [Purchase Order Number]
 - 4 O 328 [Release Number]
 - 5 M 373 [Date]
 - 6 O 367 [Contract Number]
 - 7 O 587 [Acknowledgment Type]
 - 8 O [Invoice Type Code]

Red arrows point from 'CITY' and 'STATE' in the left pane to 'PO-TYPE in HEADER' in the right pane.



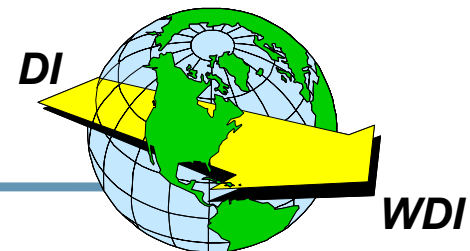
Data Transformation Mapping

- ★ **Source and Target Data are Defined by *Dictionaries*.**
- ★ **Dictionaries Define 3 Syntax Types:**
 - Data Format (Raw, C&D, CSV)
 - EDI (EDI Standard)
 - XML (Based on DTD)



Steps for Creating a New Data Transformation Map

- ★ Name and describe the map
- ★ Select the type of map
- ★ Select the source syntax type
- ★ Select the source dictionary
- ★ Select the target syntax type
- ★ Select the target dictionary



Data Transformation Mapping

★ Step 1 – Name and describe the map

Create a Map - Map Name [?] [X]

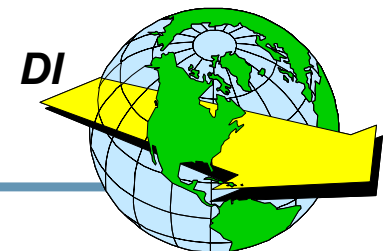
Enter the name of the new map and its description.

Map Name

Description

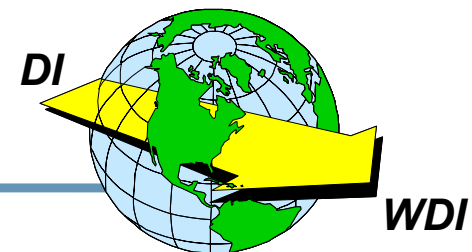
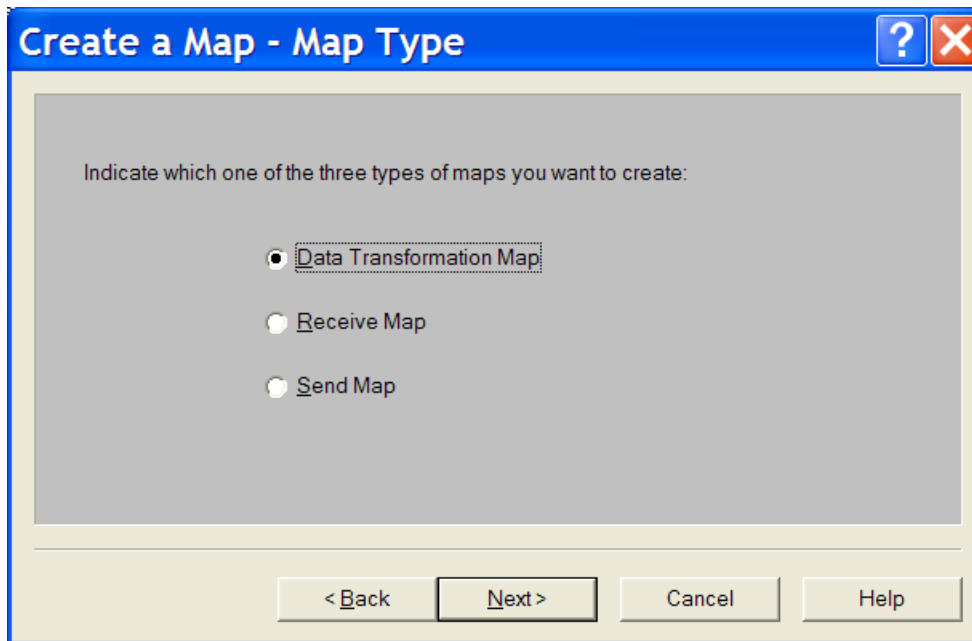
Show Existing Map Names

< Back Next > Cancel Help



Data Transformation Mapping

★ Step 2 – Identify the Type of Map



Data Transformation Mapping

★ Step 3 – Identify the Source Syntax Type

Create a Map - Source Syntax Type

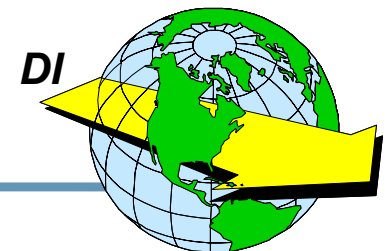
Indicate the syntax type of your source document definition:

Data Format

EDI Standard

XML

< Back Next > Cancel Help



Data Transformation Mapping

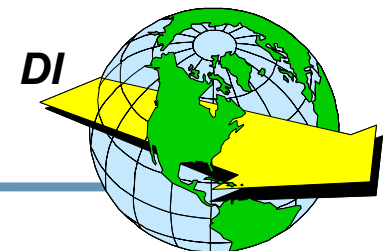
★ Step 4 – Identify the Source Dictionary

Create a Map - Source Dictionary [?] [X]

You need to identify the data format that will be used as the source document definition in your map. Start by selecting the data format dictionary that contains the data format, then press the Next button.

Dictionary Name	Description	
350REC		
AIRC856A_DIC...	AIR CAN...	
ANNUITYNET	Annuity n...	
CLASS-ADF_DI...	Class Pur...	
COMMON	Common ...	
SAMPLE		
SAMPLE-XML	Dictionar...	

< Back Next > Cancel Help



Data Transformation Mapping

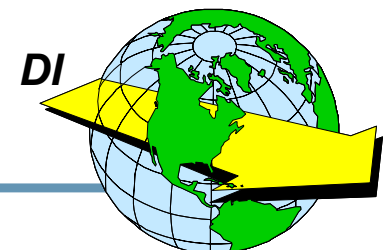
★ Step 5 – Identify the Data Format (since *Data Format* was chosen)

Create a Map - Source Data Format [?] [X]

Identify the data format that will be used as the source document definition in your map, then press the Next button.

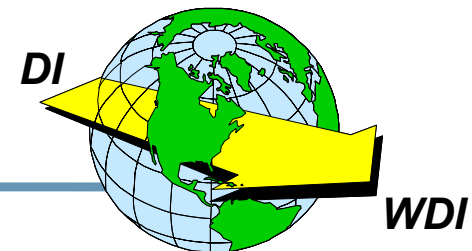
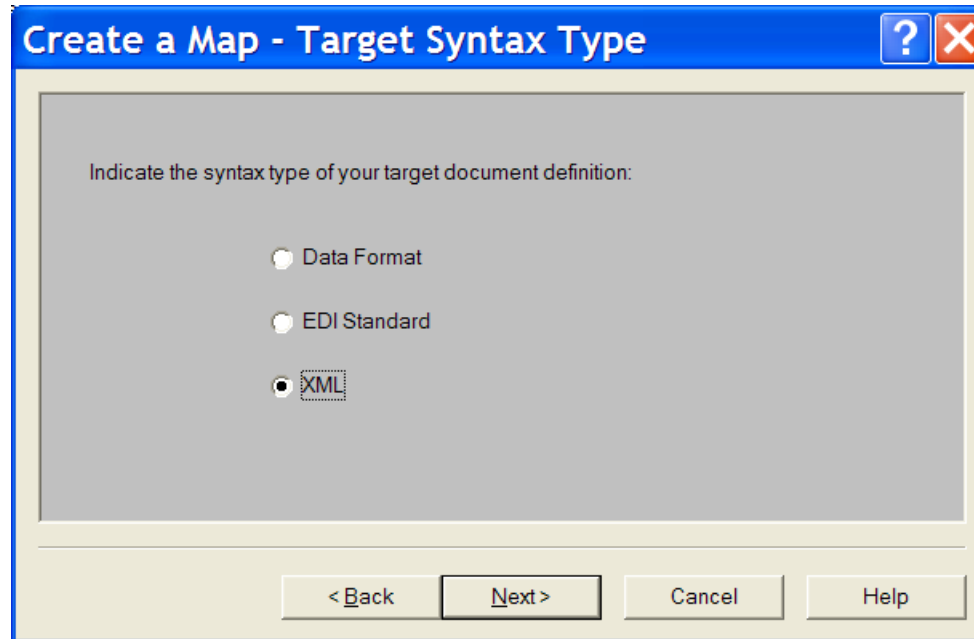
Data Format Name	Description	
PO_DATA_V2	Received...	
PO_DATA_V3	Received...	
WHAZZIT	Sample ...	

< Back Next > Cancel Help



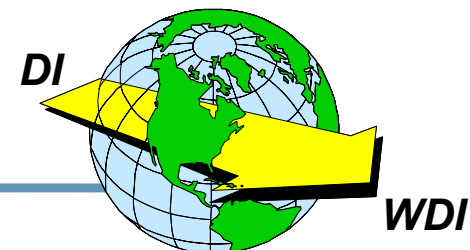
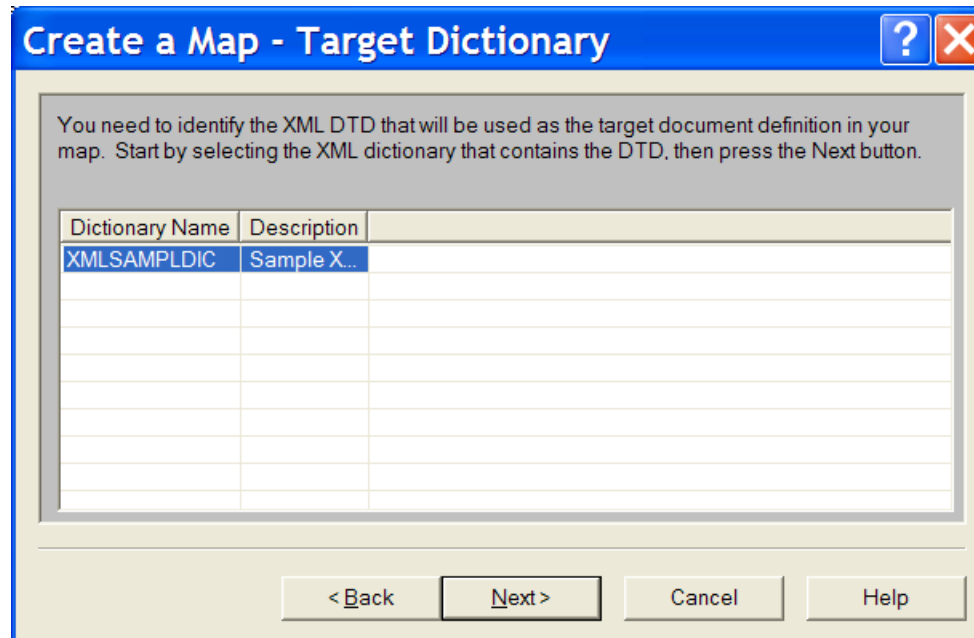
Data Transformation Mapping

★ Step 6 – Identify the Target Syntax Type



Data Transformation Mapping

★ Step 7 – Identify the Target Dictionary



Data Transformation Mapping

★ Step 8 – Confirm the Selections

Create a Map - Confirmation [?] [X]

Confirm the following selections. If correct, press Finish to save the information and open the Mapping editor.

Name:	SAMPLE-DT-MAP
Description:	Example of DT Map Definition
Type:	Data Transformation Map

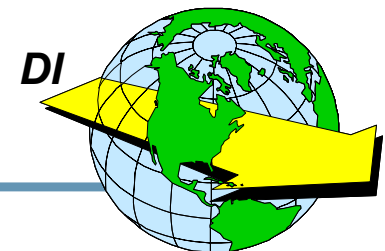
Source Document Definition:

Syntax Type:	EDI Standard
Dictionary Name:	X12V4R1
Transaction:	811

Target Document Definition:

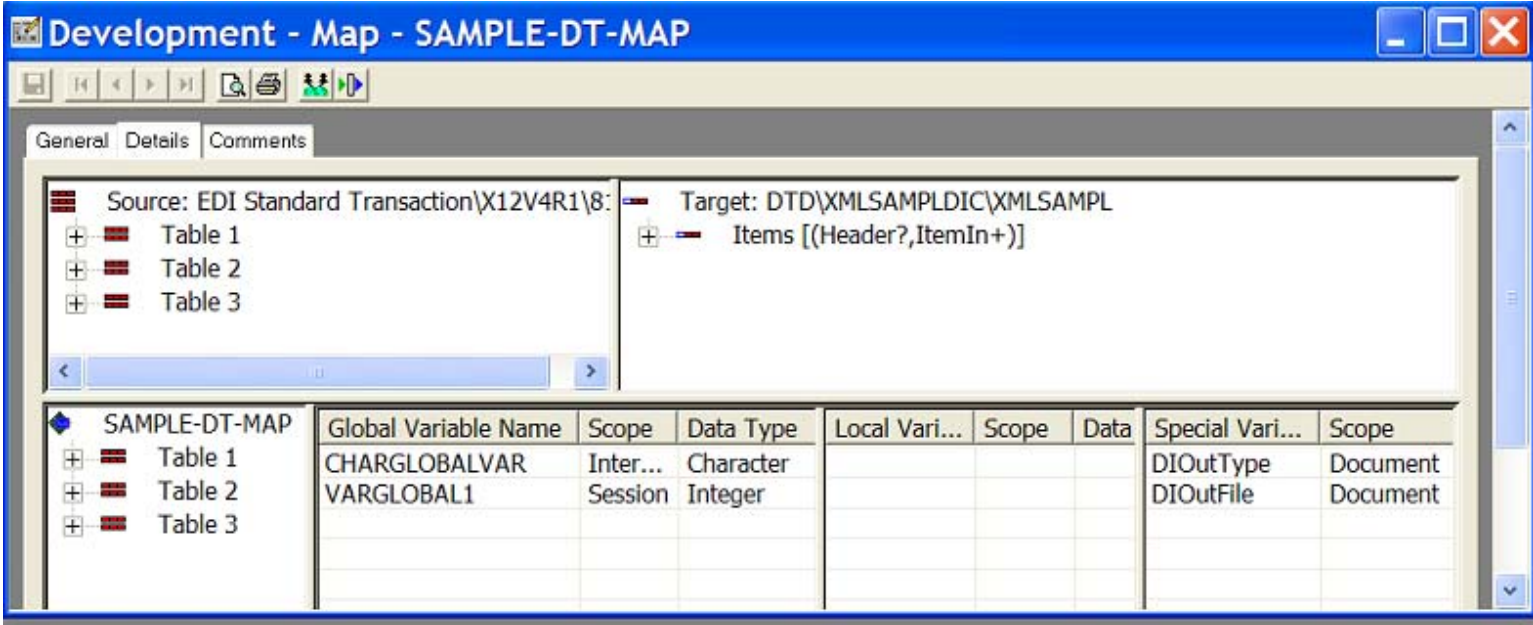
< >

< Back Finish Cancel Help



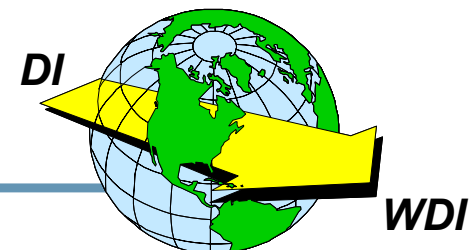
Data Transformation Mapping

★ Step 9 – Begin the Mapping Process



The screenshot shows a software window titled "Development - Map - SAMPLE-DT-MAP". The window has a menu bar with "General", "Details", and "Comments". Below the menu bar, there is a toolbar with icons for file operations and navigation. The main area is divided into two panes. The left pane shows a tree view of the source data structure, including "Table 1", "Table 2", and "Table 3". The right pane shows the target data structure, including "Items [(Header?,ItemIn+)]". Below the panes, there is a table with columns for "Global Variable Name", "Scope", "Data Type", "Local Vari...", "Scope", "Data", "Special Vari...", and "Scope".

Global Variable Name	Scope	Data Type	Local Vari...	Scope	Data	Special Vari...	Scope
CHARGLOBALVAR	Inter...	Character				DIOutType	Document
VARGLOBAL1	Session	Integer				DIOutFile	Document



Data Transformation Mapping

- ★ If EDI data had been selected, you would have been asked to select a standard and transaction.

Create a Map - Source Dictionary

You need to identify the EDI standard transaction that will be used as the source document definition in your map. Start by selecting the EDI standard dictionary that contains the transaction, then press the Next button.

Dictionary Name	Description
EDI99B	UN/EDIF...
ENVELOPE	Standard ...
FIXED	DATAFO...
UCSV4R1	UCS (Ver...
X12V3R2	ANSI AS...
X12V4R1	ANSI AS...

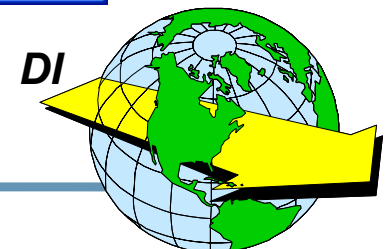
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Create a Map - Source EDI Standard Transact...

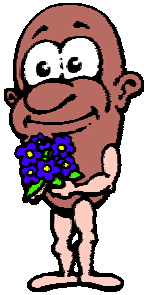
Identify the EDI standard transaction that will be used as the source document definition in your map, then press the Next button.

Transaction	Description
810	Invoice
811	Consolid...
820	Payment ...
850	Purchase...
855	Purchase...
856	Ship Noti...
860	Purchase...
997	Functiona...

< Back Next > Cancel Help

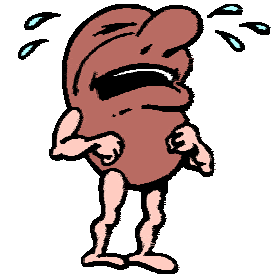


Pros and Cons



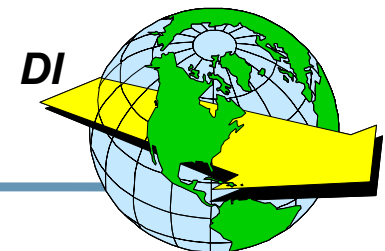
+

- ★ It supports XML translation.
- ★ It supports CSV formatted data.
- ★ It uses standard Windows conventions (e.g. drag and drop).



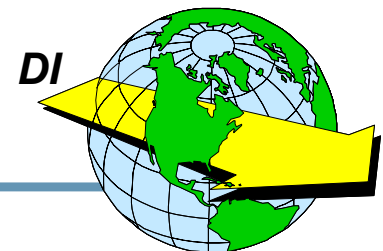
-

- ★ It requires DTDs and does not support Schemas.
- ★ Client/Server mode requires middleware and other resources.
- ★ You've got a learning curve!

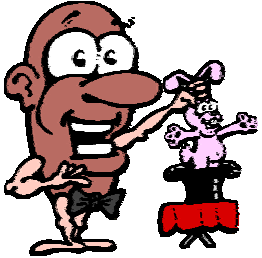


Final Recommendations

- ★ **Accept that you WILL move to the Client.**
- ★ **If XML translation is in your future, begin looking at the Client now.**
- ★ **Consider skipping the “Stand-Alone” phase and moving directly to Multi-User Client/Server mode.**
- ★ **If your installation is not yet ready to commit to the Client, do not let that prevent you from learning it and testing it in Single User Stand Alone mode.**



You Can Do It!



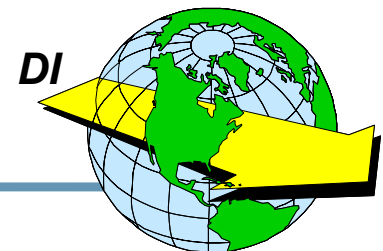
It's not magic!



Apply your skills.



Make it your bedtime reading.



Enjoy Your Stay in Tampa Bay!

