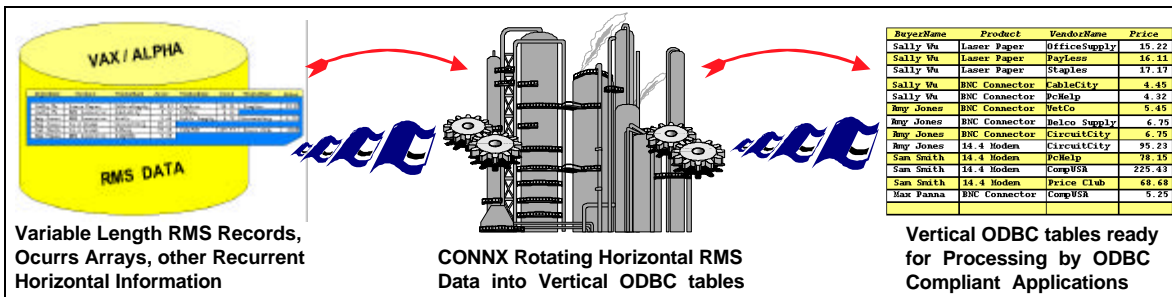


# CONNX<sup>®</sup> Tutorial

Title: **Creating Rotated Arrays with CONNX**  
 By: Ed Zuris, Senior Tech Support Analyst  
 Software Products Division  
 Date: April 9, 1998

CONNX Rotated Arrays allows you to view data that is stored in a horizontal manner, to be displayed in a vertical manner. This can have many advantages. This makes your data visible to many standard SQL functions, operations and methodologies. For example information can be summarized, averaged or otherwise statically analyzed and for reporting requirements or stored in a another table for data warehousing applications. The following picture dialog displays one approach of metamorphosing a horizontal RMS data file structure into a vertical ODBC table using CONNX.



Microsoft Access

File Edit View Format Records Window Help

Table: BUYER\_REC

BUYER_NAME	PRODUCT	VENDOR_NAME	BUY_DATE	BUYPRICE	VENDOR_NAME_2	BUY_DATE_2	BUYPRICE_2	VENDOR_NAME_3	BUY_DATE_3	BUYPRICE_3
1 Sally Wu	Laser Paper	3 OfficeSupply	12/1/95	15.22	PayLess	11/25/95	16.11	Staples	7/4/95	17.17
2 Sally Wu	BNC Connector	2 CableCity	10/17/95	8.22	PcHelp	12/15/95	4.32			0
3 Amy Jones	BNC Connector	3 Vetco	3/3/95	5.45	Delco Supply	4/17/95	6.75	CircuitCity	9/8/95	6.75
4 Amy Jones	14.4 Modem	1 CircuitCity	10/17/95	95.23			0			0
5 Sam Smith	14.4 Modem	3 PcHelp	6/10/95	78.15	CompUSA	7/16/95	225.43	Price Club	9/19/95	68.68
6 Max Panna	BNC Connector	1 CompUSA	11/17/95	5.25			0			0

Record: 1 of 6

Table: BUYER

BUYER	BUYER NAME	PRODUCT	VENDOR	VENDOR NAME	BUY DATE	BUYPRICE	cnxarraycolumn
1	Sally Wu	Laser Paper	3	OfficeSupply	12/1/95	15.22	0
1	Sally Wu	Laser Paper	3	PayLess	11/25/95	16.11	1
1	Sally Wu	Laser Paper	3	Staples	7/4/95	17.17	2
2	Sally Wu	BNC Connector	2	CableCity	10/17/95	8.22	0
2	Sally Wu	BNC Connector	2	PcHelp	12/15/95	4.32	1
3	Amy Jones	BNC Connector	3	Vetco	3/3/95	5.45	0
3	Amy Jones	BNC Connector	3	Delco Supply	4/17/95	6.75	1
3	Amy Jones	BNC Connector	3	CircuitCity	9/8/95	6.75	2
4	Amy Jones	14.4 Modem	1	CircuitCity	10/17/95	95.23	0
5	Sam Smith	14.4 Modem	3	PcHelp	6/10/95	78.15	0
5	Sam Smith	14.4 Modem	3	CompUSA	7/16/95	225.43	1
5	Sam Smith	14.4 Modem	3	Price Club	9/19/95	68.68	2
6	Max Panna	BNC Connector	1	CompUSA	11/17/95	5.25	0

Record: 4 of 13

Datasheet View

Start Microsoft Access 7:03 AM

1) Rms data that is Not Rotated.

2) Rms data that is Rotated.

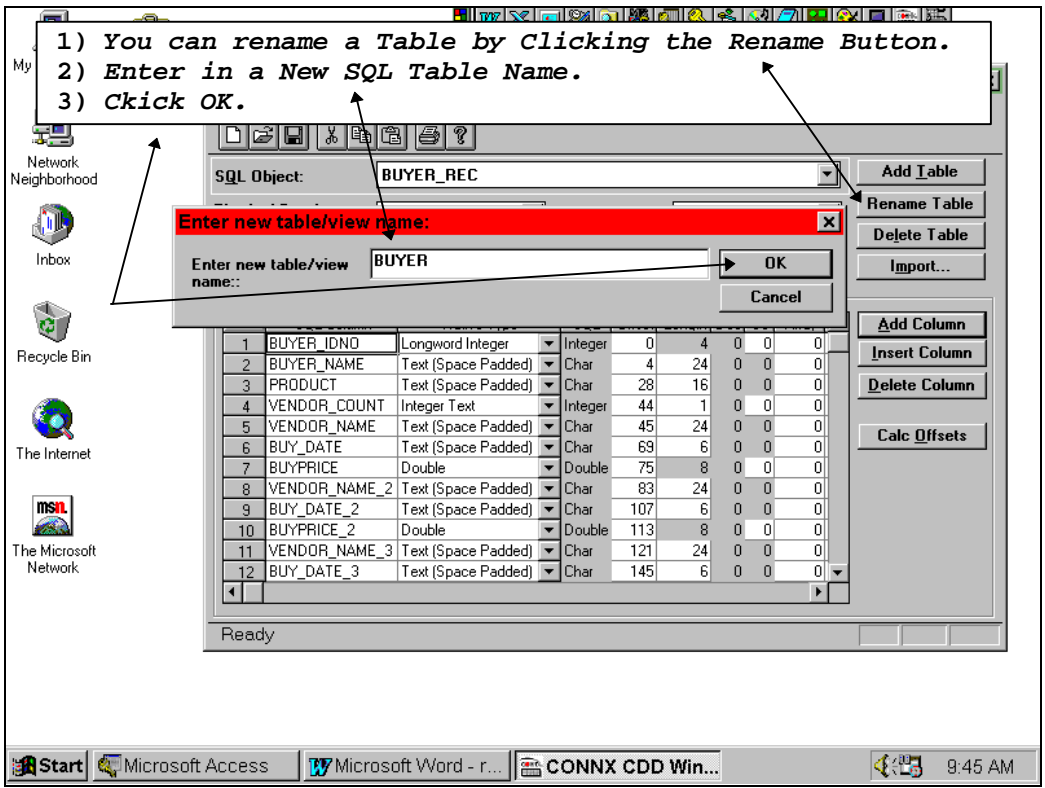
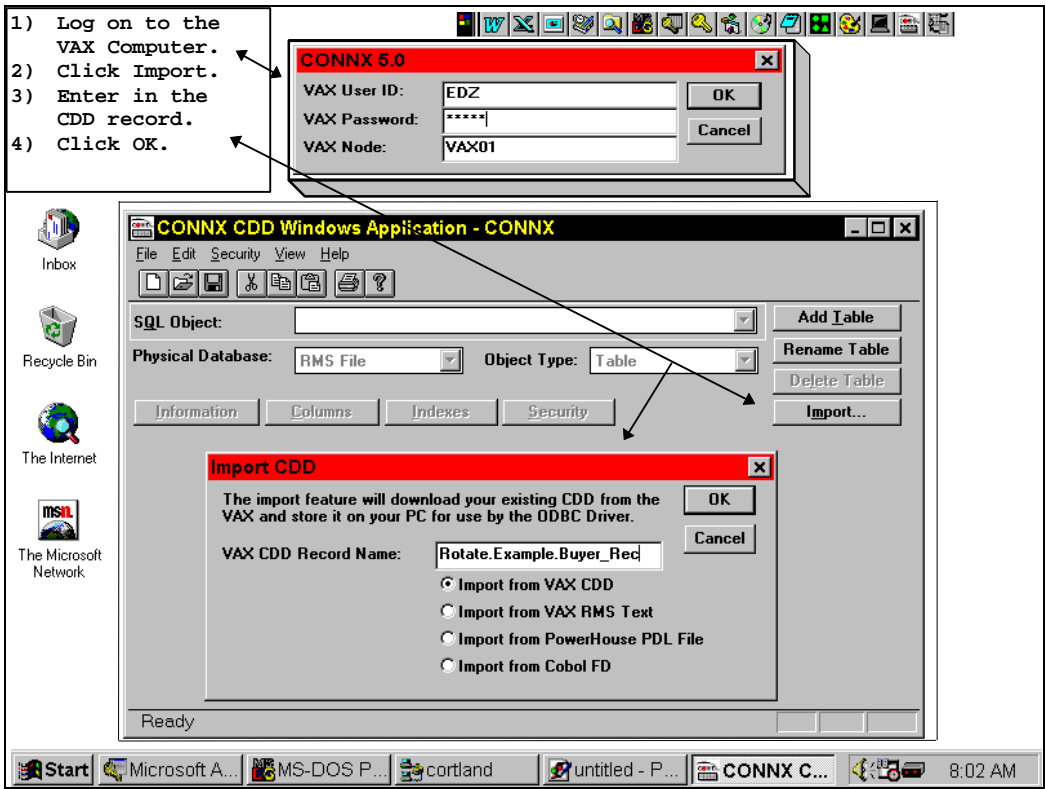
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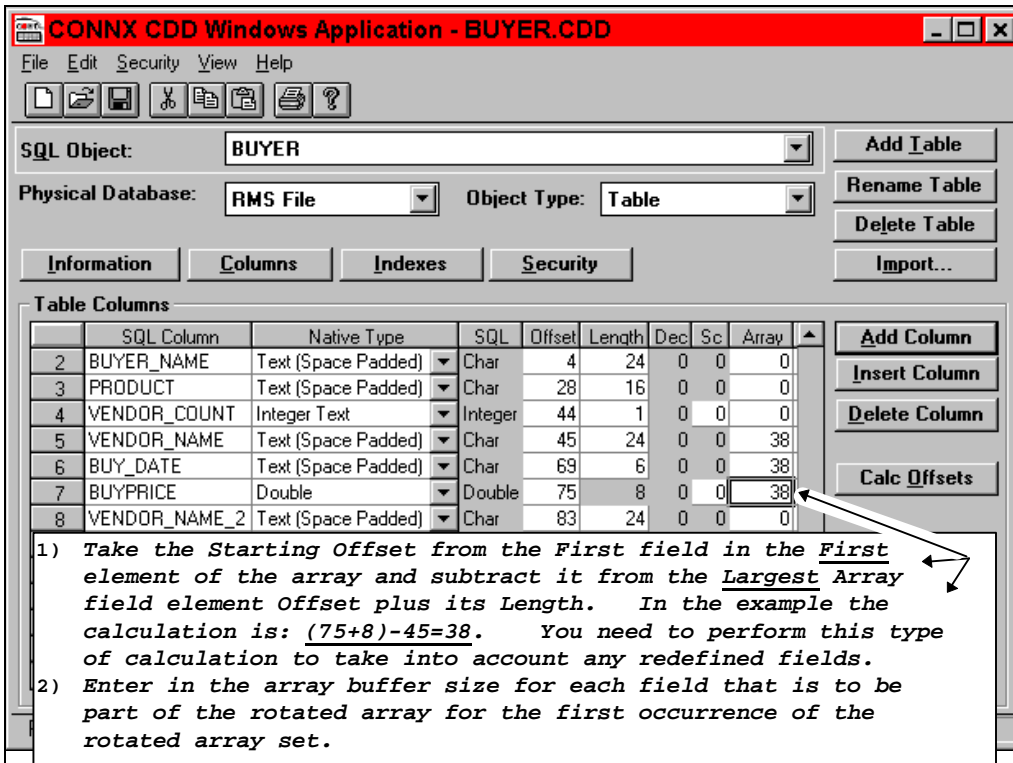
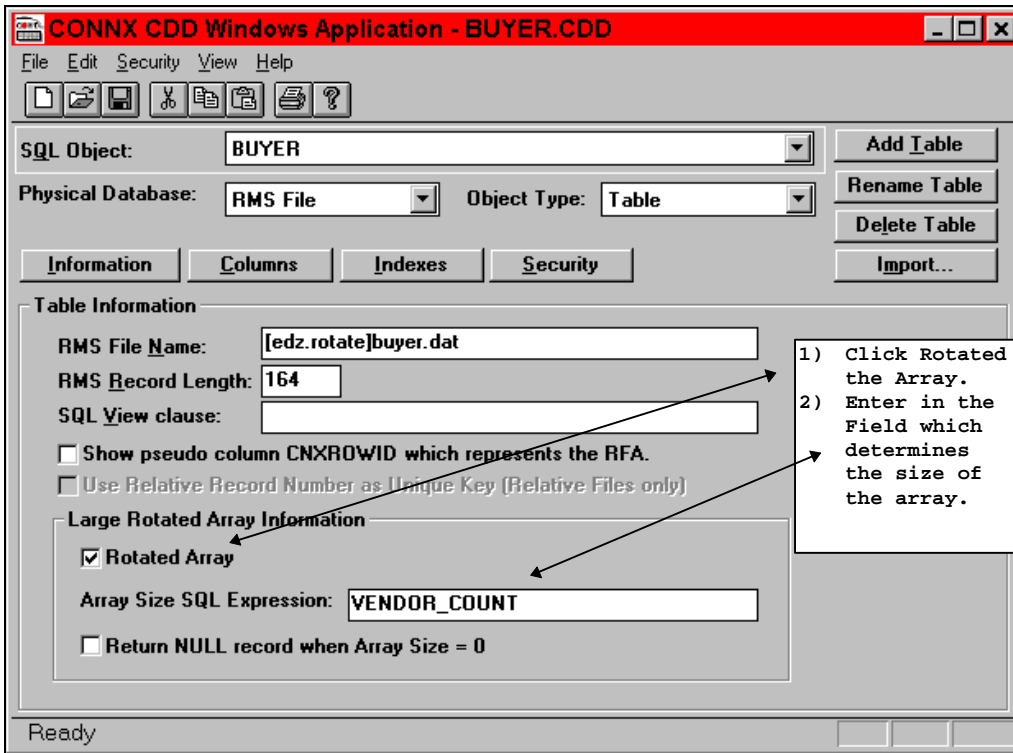
DEFINE ROTATE.EXAMPLE.RECORD BUYER_REC
DESCRIPTION IS
/* BUYER_REC USED TO DEMONSTRATE CONNX ROTATED ARRAYS */.
BUYER_REC STRUCTURE.
  BUYER_INFO STRUCTURE.
    BUYER_IDNO  DATATYPE IS SIGNED LONGWORD.
    BUYER_NAME  DATATYPE IS TEXT
                SIZE IS 24 CHARACTERS.
    PRODUCT     DATATYPE IS TEXT
                SIZE IS 16 CHARACTERS.
  END BUYER_INFO STRUCTURE.
  VENDOR_COUNT DATATYPE IS UNSIGNED NUMERIC
                SIZE IS 1 DIGIT.
  VENDOR_DETAIL STRUCTURE
    OCCURS 1 TO 3 TIMES DEPENDING ON
BUYER_REC.VENDOR_COUNT.
    VENDOR_DATA STRUCTURE.
      VENDOR_NAME DATATYPE IS TEXT
                  SIZE IS 24 CHARACTERS.
      BUY_DATE   DATATYPE IS TEXT
                  SIZE IS 6 CHARACTERS.
      BUYPRICE   DATATYPE IS D_FLOATING.
    END VENDOR_DATA STRUCTURE.
  END VENDOR_DETAIL STRUCTURE.
END BUYER_REC STRUCTURE.
END BUYER_REC RECORD.

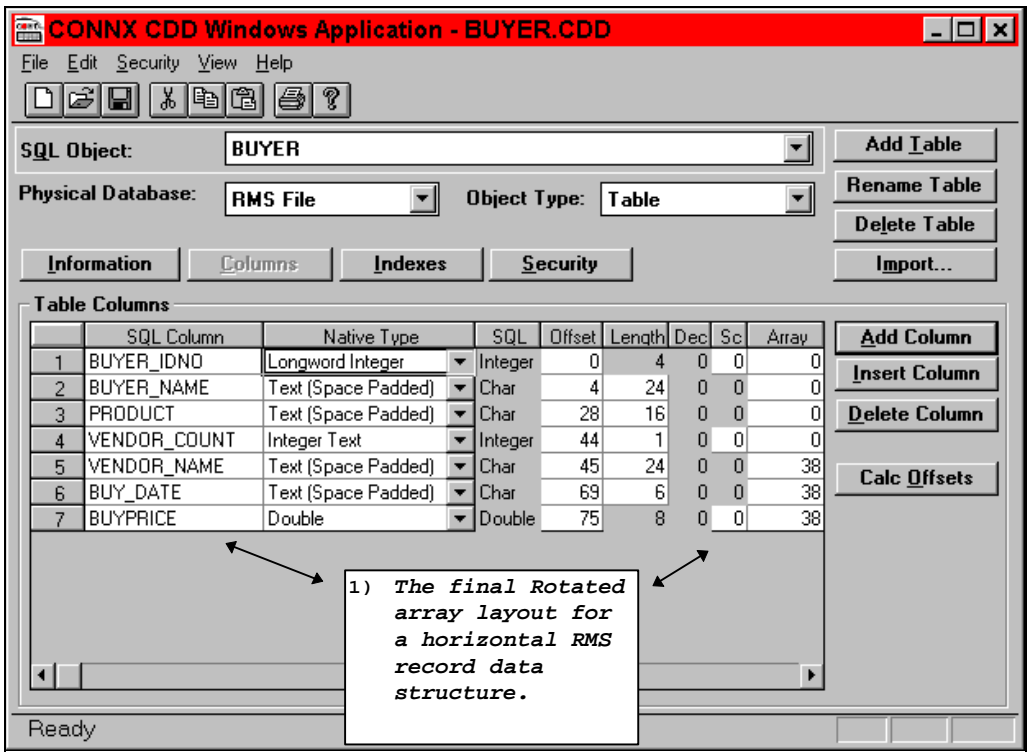
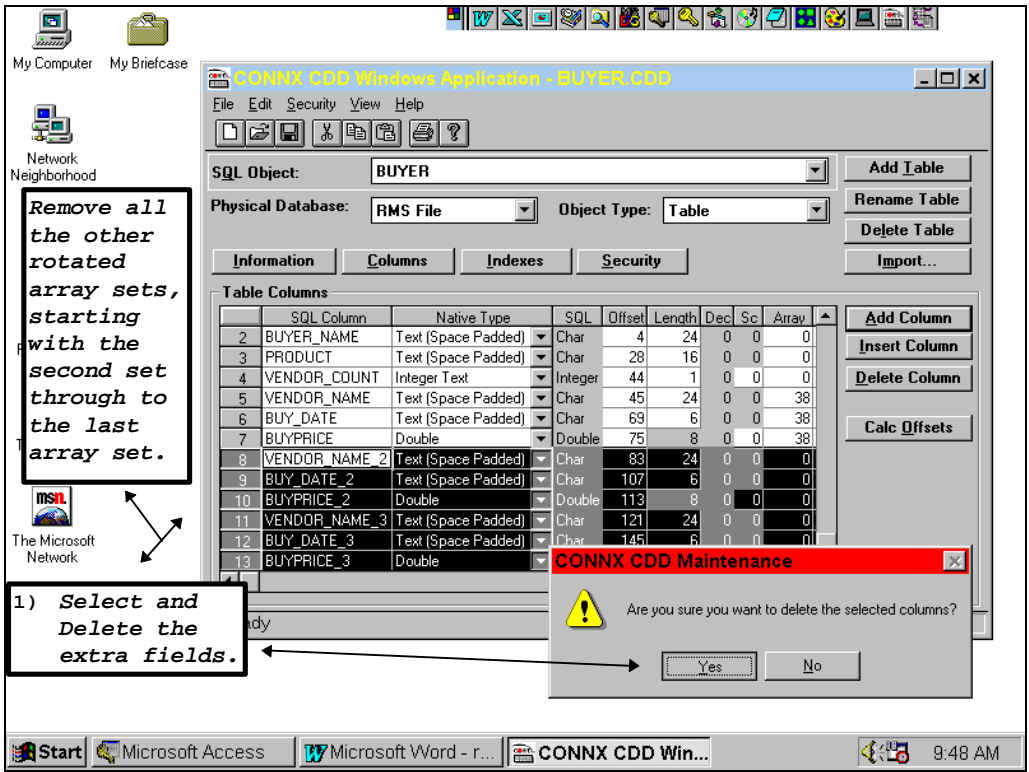
```

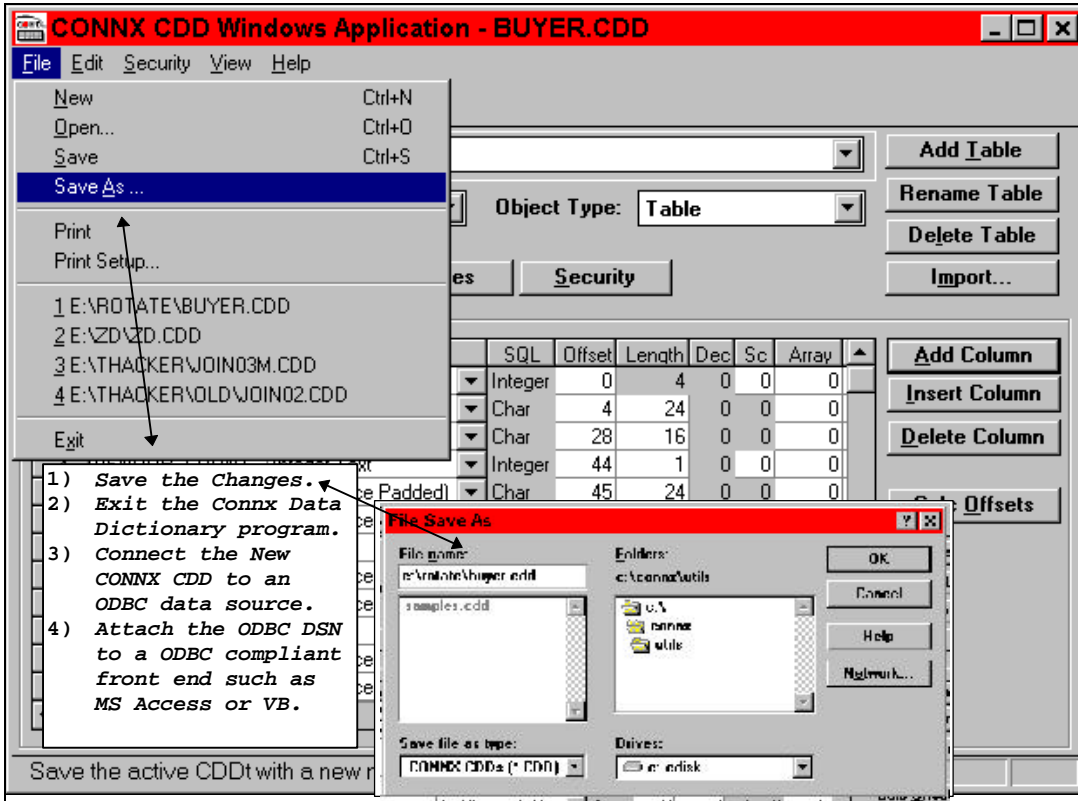
*This record definition makes a horizontal RMS data structure.*

BY	BUYER_NAME	PRODUCT	VE	VENDOR_NAME	BUY_DATE	BUYPRICE	VENDOR_NAME_2	BUY_DATE_2	BUYPRICE_2	VENDOR_NAME_3	BUY_DATE_3	BUYPRICE_3
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