

Get Running with the IBM Db2 for i .NET Provider

Gen Db2 for i Stored Procedures and OO Wrapper Source using c#, IBM SQL PL and the MS .NET Framework

Go Set Row Filters Off And Refill Return

SQL SELECT Statement or Table Name (DB file) or Stored Procedure Name
select * from artrc1

SQL Command Option
Run Inline SQL

SP WHERE Clause Column Names Forming Unique Key (Required to Gen Several Complete SPs) (1 column name per line without delimiters or extra spaces)
AR_TRANS_CODE

Primary File Audit (date and time etc.) Columns (and others) to Omit from Overlay Protection (one per line) (Optional)
ENTRY_AUDIT_COMPANY_NUMBER
ENTRY_AUDIT_DATE
ENTRY_AUDIT_TIME
ENTRY_AUDIT_WORKSTATION
ENTRY_AUDIT_USER_PROFILE
ENTRY_AUDIT_FPS_USER_CODE
ENTRY_AUDIT_FUNCTION

Row Filtering (via the GridView)

Wrapper Source Options

Connection Service Definition Object Name

Command Object Name
cmdDB2iSQL1

Transaction Object Name for Commit and Rollback (optional)
sqlcmdtxBoundaryName

Gen SP Input Parm Code - Add CCSID

Gen SP Input Parm Code - Default Value Option
Don't Specify

Cosmetics

Replace Column Heading Underlines with Blanks

Transform to Mixed Case in Column Headings

Error Message Delivery Option Interactive Email Both

Display Secondary Error Message and Stack Trace

Go Set Row Filters Off And Refill Return

-- Simple row counts from Results Gridview:

Row Count (retrieved from DB): = 4
Filtered Row Count: 4

Logical Delete Flag	Ar Trans Code	Ar Trans Code Description	Ar Trans Code Default Comment	Currency Code	Ar Trans Type	Nlramt	Nhramt	Nupdit	Nex
N	GRTCPBLF	Get Running-TCP (Base) License Fee	GR-TCPb LicFee v1.1	USD	I	0.00	1000.00	Y	N
N	GRTCP1LF	Get Running-TCP (Add-On 1) License Fee	GR-TCP1 LicFee v1.1	USD	I	0.00	1000.00	Y	N
N	GRTCP2LF	Get Running-TCP (Add-On 2) License Fee	GR-TCP2 LicFee v1.1	USD	I	0.00	1000.00	Y	N
N	GRTCP2MP	Get Running-TCP (Add-On 2) Maintenance	GR-TCP2 MntPln v1.1	USD	I	0.00	1000.00	Y	N

-- Simple row counts from Results Gridview:

Row Count (retrieved from DB): = 4
Filtered Row Count: 4

-- Simple SQL Columns List from Results Gridview (with SQL PL Syntax):

```
LOGICAL_DELETE_FLAG ,
AR_TRANS_CODE ,
AR_TRANS_CODE_DESCRIPTION ,
AR_TRANS_CODE_DEFAULT_COMMENT ,
CURRENCY_CODE ,
AR_TRANS_TYPE ,
NLRAMT ,
NHRAMT ,
NUPDIT ,
NEXAPC
```

-- Simple Primary File SQL Columns List (with SQL PL Syntax):

```
LOGICAL_DELETE_FLAG ,
AR_TRANS_CODE ,
AR_TRANS_CODE_DESCRIPTION ,
AR_TRANS_CODE_DEFAULT_COMMENT ,
CURRENCY_CODE ,
AR_TRANS_TYPE ,
NLRAMT ,
NHRAMT ,
NUPDIT ,
NEXAPC
```

// Simple Populate of Input Parameters in c# (Inz Manufactured Parm List 3):
// (fixed-length character columns are padded with blanks using code like this: new String(" ", x)
// just to show size of character data)
// (please note padding of this nature is not advised or required for Db2 for i SP(s))

```
cmdDB2iSQL1.Parameters["@LOGICAL_DELETE_FLAG"].Value = new String(" ", 1);
cmdDB2iSQL1.Parameters["@AR_TRANS_CODE"].Value = new String(" ", 8);
cmdDB2iSQL1.Parameters["@AR_TRANS_CODE_DESCRIPTION"].Value = new String(" ", 40);
cmdDB2iSQL1.Parameters["@AR_TRANS_CODE_DEFAULT_COMMENT"].Value = new String(" ", 20);
cmdDB2iSQL1.Parameters["@CURRENCY_CODE"].Value = new String(" ", 3);
cmdDB2iSQL1.Parameters["@AR_TRANS_TYPE"].Value = new String(" ", 1);
cmdDB2iSQL1.Parameters["@NLRAMT"].Value = new String(" ", 9);
cmdDB2iSQL1.Parameters["@NHRAMT"].Value = new String(" ", 9);
cmdDB2iSQL1.Parameters["@NUPDIT"].Value = new String(" ", 1);
cmdDB2iSQL1.Parameters["@NEXAPC"].Value = new String(" ", 1);
```

-- Simple SQL Columns List via Results Gridview:

```
LOGICAL_DELETE_FLAG
AR_TRANS_CODE
AR_TRANS_CODE_DESCRIPTION
AR_TRANS_CODE_DEFAULT_COMMENT
CURRENCY_CODE
AR_TRANS_TYPE
NLRAMT
NHRAMT
NUPDIT
NEXAPC
```

-- Complete Parm List from Primary File in SQL PL Syntax:

```
@PARAM_LOGICAL_DELETE_FLAG ,
@PARAM_AR_TRANS_CODE ,
@PARAM_AR_TRANS_CODE_DESCRIPTION ,
@PARAM_AR_TRANS_CODE_DEFAULT_COMMENT ,
@PARAM_CURRENCY_CODE ,
@PARAM_AR_TRANS_TYPE ,
@PARAM_NLRAMT ,
@PARAM_NHRAMT ,
@PARAM_NUPDIT ,
@PARAM_NEXAPC
```

-- SP Input Parameters with Definitions from Primary File:

```
IN @PARAM_LOGICAL_DELETE_FLAG CHAR(1),
IN @PARAM_AR_TRANS_CODE CHAR(8),
IN @PARAM_AR_TRANS_CODE_DESCRIPTION CHAR(40),
IN @PARAM_AR_TRANS_CODE_DEFAULT_COMMENT CHAR(20),
IN @PARAM_CURRENCY_CODE CHAR(3),
IN @PARAM_AR_TRANS_TYPE CHAR(1),
IN @PARAM_NLRAMT DECIMAL(9,2),
IN @PARAM_NHRAMT DECIMAL(9,2),
IN @PARAM_NUPDIT CHAR(1),
IN @PARAM_NEXAPC CHAR(1)
```

-- Simple SQL PL SET Statements List via Results Gridview Headings:

```
LOGICAL_DELETE_FLAG = @PARAM_LOGICAL_DELETE_FLAG ,
AR_TRANS_CODE = @PARAM_AR_TRANS_CODE ,
AR_TRANS_CODE_DESCRIPTION = @PARAM_AR_TRANS_CODE_DESCRIPTION ,
AR_TRANS_CODE_DEFAULT_COMMENT = @PARAM_AR_TRANS_CODE_DEFAULT_COMMENT ,
CURRENCY_CODE = @PARAM_CURRENCY_CODE ,
AR_TRANS_TYPE = @PARAM_AR_TRANS_TYPE ,
NLRAMT = @PARAM_NLRAMT ,
NHRAMT = @PARAM_NHRAMT ,
NUPDIT = @PARAM_NUPDIT ,
NEXAPC = @PARAM_NEXAPC
```

// c# - SP Input Parameters populated based on System Column Names:

```
cmdDB2iSQL1.Parameters["@LOGICAL_DELETE_FLAG"].Value = DLFLG ,
cmdDB2iSQL1.Parameters["@AR_TRANS_CODE"].Value = ARTRC ,
cmdDB2iSQL1.Parameters["@AR_TRANS_CODE_DESCRIPTION"].Value = NTCDS1 ,
cmdDB2iSQL1.Parameters["@AR_TRANS_CODE_DEFAULT_COMMENT"].Value = NTCDS2 ,
cmdDB2iSQL1.Parameters["@CURRENCY_CODE"].Value = CURNC ,
cmdDB2iSQL1.Parameters["@AR_TRANS_TYPE"].Value = NTRTYP ,
cmdDB2iSQL1.Parameters["@NLRAMT"].Value = NLRAMT ,
cmdDB2iSQL1.Parameters["@NHRAMT"].Value = NHRAMT ,
cmdDB2iSQL1.Parameters["@NUPDIT"].Value = NUPDIT ,
cmdDB2iSQL1.Parameters["@NEXAPC"].Value = NEXAPC
```

-- Update Primary file SQL Column Names based on input parameters names (SP source code):

```
LOGICAL_DELETE_FLAG = @PARAM_LOGICAL_DELETE_FLAG ,
AR_TRANS_CODE = @PARAM_AR_TRANS_CODE ,
AR_TRANS_CODE_DESCRIPTION = @PARAM_AR_TRANS_CODE_DESCRIPTION ,
AR_TRANS_CODE_DEFAULT_COMMENT = @PARAM_AR_TRANS_CODE_DEFAULT_COMMENT ,
CURRENCY_CODE = @PARAM_CURRENCY_CODE ,
AR_TRANS_TYPE = @PARAM_AR_TRANS_TYPE ,
NLRAMT = @PARAM_NLRAMT ,
NHRAMT = @PARAM_NHRAMT ,
NUPDIT = @PARAM_NUPDIT ,
NEXAPC = @PARAM_NEXAPC
```

Table Name	Column Name	Ordinal Position	Column Default	Is Nullable	Data Type	Ccsid	Character Maximum Length	Numeric Precision	Numeri Scale
ARTRC1	LOGICAL_DELETE_FLAG	1	''	N	CHAR	37	1		
ARTRC1	AR_TRANS_CODE	2	''	N	CHAR	37	8		
ARTRC1	AR_TRANS_CODE_DESCRIPTION	3	''	N	CHAR	37	40		
ARTRC1	AR_TRANS_CODE_DEFAULT_COMMENT	4	''	N	CHAR	37	20		
ARTRC1	CURRENCY_CODE	5	''	N	CHAR	37	3		
ARTRC1	AR_TRANS_TYPE	6	''	N	CHAR	37	1		
ARTRC1	NLRAMT	7	0	N	DECIMAL			9	2
ARTRC1	NHRAMT	8	0	N	DECIMAL			9	2
ARTRC1	NUPDIT	9	''	N	CHAR	37	1		
ARTRC1	NEXAPC	10	''	N	CHAR	37	1		
ARTRC1	NBALTZ	11	''	N	CHAR	37	1		
ARTRC1	NCLCPT	12	''	N	CHAR	37	1		
ARTRC1	OVERRIDE_PAYMENT_TERMS_CODE	13	''	N	CHAR	37	10		
ARTRC1	OVERRIDE_TERMS_CODE_CREDITS	14	''	N	CHAR	37	10		
ARTRC1	TRACKING_BY_CALENDAR_1	15	''	N	CHAR	37	12		
ARTRC1	TRACKING_BY_CALENDAR_2	16	''	N	CHAR	37	12		
ARTRC1	TRACKING_BY_CALENDAR_3	17	''	N	CHAR	37	12		
ARTRC1	TRACKING_BY_CALENDAR_4	18	''	N	CHAR	37	12		
ARTRC1	TRACKING_BY_CALENDAR_5	19	''	N	CHAR	37	12		
ARTRC1	NGENSHS	20	''	N	CHAR	37	1		
ARTRC1	NHSBSM	21	''	N	CHAR	37	1		
ARTRC1	JE_PROCESSING_CODE	22	''	N	CHAR	37	10		
ARTRC1	GL_POSTING_ACCT_OFFSETS_ARCTL	23	''	N	CHAR	37	21		
ARTRC1	NGLDSC	24	''	N	CHAR	37	1		
ARTRC1	NCREAT	25	''	N	CHAR	37	1		
ARTRC1	NINPRC	26	''	N	CHAR	37	1		
ARTRC1	AR_INVOICE_NUMBER	27	0	N	DECIMAL			7	0
ARTRC1	AR_SUBSIDIARY_CTL_GL_ACCOUNT	28	''	N	CHAR	37	21		
ARTRC1	LOCATION	29	''	N	CHAR	37	4		
ARTRC1	AR_CLIENT_PO_NUMBER	30	''	N	CHAR	37	12		
ARTRC1	NCRTPW	31	''	N	CHAR	37	1		
ARTRC1	NCYPPA	32	''	N	CHAR	37	1		
ARTRC1	NPYPPA	33	''	N	CHAR	37	1		
ARTRC1	NPRTIV	34	''	N	CHAR	37	1		
ARTRC1	NPCSHR	35	''	N	CHAR	37	1		
ARTRC1	AR_UNITS	36	0	N	DECIMAL			9	2
ARTRC1	NDFAPU	37	0	N	DECIMAL			9	2
ARTRC1	DEFAULT_TRANS_CODE_VOIDS_NI	38	''	N	CHAR	37	8		
ARTRC1	DEFAULT_TRANS_CODE_CREDITS_NI	39	''	N	CHAR	37	8		
ARTRC1	CUSTOMER	40	0	N	DECIMAL			10	0
ARTRC1	NCRCHK	41	''	N	CHAR	37	1		
ARTRC1	NRQQTY	42	''	N	CHAR	37	1		
ARTRC1	ITEM_CLASS_PROJECT_BASED	43	''	N	CHAR	37	8		
ARTRC1	NREXFE	44	''	N	CHAR	37	1		
ARTRC1	COMPANY_NUMBER	45	0	N	DECIMAL			3	0
ARTRC1	DIGITAL_ASSET_SERIES_NAME	46	''	N	CHAR	37	255		
ARTRC1	DIGITAL_SERIES_VERS_ITEM_LVL	47	''	N	CHAR	37	30		
ARTRC1	EXP_LEN_UOM_ITEM_LEVEL	48	''	N	CHAR	37	2		
ARTRC1	EXP_LEN_QTY_ITEM_LEVEL	49	0	N	DECIMAL			5	0
ARTRC1	DIGITAL_VERSION_DOWNLOAD_AD_ELIG	50	''	N	CHAR	37	30		
ARTRC1	EXP_LEN_UOM_DOWNLOAD	51	''	N	CHAR	37	2		
ARTRC1	EXP_LEN_QTY_DOWNLOAD	52	''	N	DECIMAL			5	0
ARTRC1	DIGITAL_VERSION_SUPPORT_T_ELIG	53	''	N	CHAR	37	30		
ARTRC1	EXP_LEN_UOM_SUPPORT	54	''	N	CHAR	37	2		
ARTRC1	EXP_LEN_QTY_SUPPORT	55	0	N	DECIMAL			5	0
ARTRC1	ENTRY_AUDIT_COMPANY_NUMBER	56	0	N	DECIMAL			3	0
ARTRC1	ENTRY_AUDIT_DATE	57	0	N	DECIMAL			8	0
ARTRC1	ENTRY_AUDIT_TIME	58	0	N	DECIMAL			6	0
ARTRC1	ENTRY_AUDIT_WORKSTATION	59	''	N	CHAR	37	10		
ARTRC1	ENTRY_AUDIT_USER_PROFILE	60	''	N	CHAR	37	10		
ARTRC1	ENTRY_AUDIT_FPS_USER_CODE	61	''	N	CHAR	37	10		
ARTRC1	ENTRY_AUDIT_FUNCTION	62	''	N	CHAR	37	1		

-- INSERT Stored Procedure Source (basic but complete):

```
DROP SPECIFIC PROCEDURE TFDATABAS4/ARTRC1ROWADD ;
SET PATH *LIBL ;
CREATE PROCEDURE TFDATABAS4/ARTRC1ROWADD (
IN @PARAM_LOGICAL_DELETE_FLAG CHAR(1),
IN @PARAM_AR_TRANS_CODE CHAR(8),
IN @PARAM_AR_TRANS_CODE_DESCRIPTION CHAR(40),
IN @PARAM_AR_TRANS_CODE_DEFAULT_COMMENT CHAR(20),
IN @PARAM_CURRENCY_CODE CHAR(3),
IN @PARAM_AR_TRANS_TYPE CHAR(1),
IN @PARAM_NLRAMT DECIMAL(9,2),
IN @PARAM_NHRAMT DECIMAL(9,2),
IN @PARAM_NUPDIT CHAR(1),
IN @PARAM_NEXAPC CHAR(1))
```

-- UPDATE Stored Procedure Source (basic but complete):

```
DROP SPECIFIC PROCEDURE TFDATABAS4/ARTRC1ROWUPDATE ;
SET PATH *LIBL ;
CREATE PROCEDURE TFDATABAS4/ARTRC1ROWUPDATE (
IN @PARAM_LOGICAL_DELETE_FLAG CHAR(1),
IN @PARAMORIG_AR_TRANS_CODE CHAR(8),
IN @PARAM_AR_TRANS_CODE_DESCRIPTION CHAR(40),
IN @PARAM_AR_TRANS_CODE_DEFAULT_COMMENT CHAR(20),
IN @PARAM_CURRENCY_CODE CHAR(3),
IN @PARAM_AR_TRANS_TYPE CHAR(1),
IN @PARAM_NLRAMT DECIMAL(9,2),
IN @PARAM_NHRAMT DECIMAL(9,2),
IN @PARAM_NUPDIT CHAR(1),
IN @PARAM_NEXAPC CHAR(1))
```

-- SP Input Parameters for WHERE Clause Columns:

```
IN @PARAMORIG_AR_TRANS_CODE CHAR(8)
```

-- ROWREAD Stored Procedure Source (basic but complete):

```
DROP SPECIFIC PROCEDURE TFDATABAS4/ARTRC1ROWREAD ;
SET PATH *LIBL ;
CREATE PROCEDURE TFDATABAS4/ARTRC1ROWREAD (
IN @PARAMORIG_AR_TRANS_CODE CHAR(8))
```

-- ROWLOCK Stored Procedure Source (basic but complete):

```
DROP SPECIFIC PROCEDURE TFDATABAS4/ARTRC1ROWLOCK ;
SET PATH *LIBL ;
CREATE PROCEDURE TFDATABAS4/ARTRC1ROWLOCK (
IN @PARAMORIG_AR_TRANS_CODE CHAR(8))
```

-- ROWLIST Stored Procedure Source (basic but complete):

```
DROP SPECIFIC PROCEDURE TFDATABAS4/ARTRC1ROWLIST ;
SET PATH *LIBL ;
CREATE PROCEDURE TFDATABAS4/ARTRC1ROWLIST (
IN @PARAMORIG_AR_TRANS_CODE CHAR(8))
```

-- Simple Primary File Concurrency SQL Columns List (with SQL PL Syntax):

```
LOGICAL_DELETE_FLAG ,
AR_TRANS_CODE ,
AR_TRANS_CODE_DESCRIPTION ,
AR_TRANS_CODE_DEFAULT_COMMENT ,
CURRENCY_CODE ,
AR_TRANS_TYPE ,
NLRAMT ,
NHRAMT ,
NUPDIT ,
NEXAPC
```

-- ROWREADCONCURRENCYCOLUMNS Stored Procedure Source (basic but complete):

```
DROP SPECIFIC PROCEDURE TFDATABAS4/ARTRC1ROWREADCONCURRENCYCOLUMNS ;
SET PATH *LIBL ;
CREATE PROCEDURE TFDATABAS4/ARTRC1ROWREADCONCURRENCYCOLUMNS (
IN @PARAMORIG_AR_TRANS_CODE CHAR(8))
```

-- ROWLOCKCONCURRENCYCOLUMNS Stored Procedure Source (basic but complete):

```
DROP SPECIFIC PROCEDURE TFDATABAS4/ARTRC1ROWLOCKCONCURRENCYCOLUMNS ;
SET PATH *LIBL ;
CREATE PROCEDURE TFDATABAS4/ARTRC1ROWLOCKCONCURRENCYCOLUMNS (
IN @PARAMORIG_AR_TRANS_CODE CHAR(8))
```

-- SP Output Parameters from Results GridView Columns:

```
OUT @OUTPARAM_LOGICAL_DELETE_FLAG CHAR(1),
OUT @OUTPARAM_AR_TRANS_CODE_DESCRIPTION CHAR(40),
OUT @OUTPARAM_AR_TRANS_CODE_DEFAULT_COMMENT CHAR(20),
OUT @OUTPARAM_CURRENCY_CODE CHAR(3),
OUT @OUTPARAM_AR_TRANS_TYPE CHAR(1),
OUT @OUTPARAM_NLRAMT DECIMAL(9,2),
OUT @OUTPARAM_NHRAMT DECIMAL(9,2),
OUT @OUTPARAM_NUPDIT CHAR(1),
OUT @OUTPARAM_NEXAPC CHAR(1),
OUT @OUTPARAM_NBALTZ CHAR(1),
OUT @OUTPARAM_NCLCPT CHAR(1)
```

// Simple SQL PL Populate INTO Output Parmas Statements List via Results Gridview Headings:

```
LOGICAL_DELETE_FLAG = @PARAM_LOGICAL_DELETE_FLAG ,
AR_TRANS_CODE = @PARAM_AR_TRANS_CODE ,
AR_TRANS_CODE_DESCRIPTION = @PARAM_AR_TRANS_CODE_DESCRIPTION ,
AR_TRANS_CODE_DEFAULT_COMMENT = @PARAM_AR_TRANS_CODE_DEFAULT_COMMENT ,
CURRENCY_CODE = @PARAM_CURRENCY_CODE ,
AR_TRANS_TYPE = @PARAM_AR_TRANS_TYPE ,
NLRAMT = @PARAM_NLRAMT ,
NHRAMT = @PARAM_NHRAMT ,
NUPDIT = @PARAM_NUPDIT ,
NEXAPC = @PARAM_NEXAPC
```

-- ROWRTV Read Row INTO Output Parmas Stored Procedure Source (basic but complete):

```
DROP SPECIFIC PROCEDURE TFDATABAS4/ARTRC1ROWRTV ;
SET PATH *LIBL ;
CREATE PROCEDURE TFDATABAS4/ARTRC1ROWRTV (
IN @PARAMORIG_AR_TRANS_CODE CHAR(8),
OUT @OUTPARAM_LOGICAL_DELETE_FLAG CHAR(1),
OUT @OUTPARAM_AR_TRANS_CODE_DESCRIPTION CHAR(40),
OUT @OUTPARAM_AR_TRANS_CODE_DEFAULT_COMMENT CHAR(20),
OUT @OUTPARAM_CURRENCY_CODE CHAR(3),
OUT @OUTPARAM_AR_TRANS_TYPE CHAR(1),
OUT @OUTPARAM_NLRAMT DECIMAL(9,2),
OUT @OUTPARAM_NHRAMT DECIMAL(9,2),
OUT @OUTPARAM_NUPDIT CHAR(1),
OUT @OUTPARAM_NEXAPC CHAR(1),
OUT @OUTPARAM_NBALTZ CHAR(1),
OUT @OUTPARAM_NCLCPT CHAR(1))
```

-- ROWRTVLOCK Read Row INTO Output Parmas "With Lock" Stored Procedure Source (basic but complete):

```
DROP SPECIFIC PROCEDURE TFDATABAS4/ARTRC1ROWRTVLOCK ;
SET PATH *LIBL ;
CREATE PROCEDURE TFDATABAS4/ARTRC1ROWRTVLOCK (
IN @PARAMORIG_AR_TRANS_CODE CHAR(8),
OUT @OUTPARAM_LOGICAL_DELETE_FLAG CHAR(1),
OUT @OUTPARAM_AR_TRANS_CODE_DESCRIPTION CHAR(40),
OUT @OUTPARAM_AR_TRANS_CODE_DEFAULT_COMMENT CHAR(20),
OUT @OUTPARAM_CURRENCY_CODE CHAR(3),
OUT @OUTPARAM_AR_TRANS_TYPE CHAR(1),
OUT @OUTPARAM_NLRAMT DECIMAL(9,2),
OUT @OUTPARAM_NHRAMT DECIMAL(9,2),
OUT @OUTPARAM_NUPDIT CHAR(1),
OUT @OUTPARAM_NEXAPC CHAR(1),
OUT @OUTPARAM_NBALTZ CHAR(1),
OUT @OUTPARAM_NCLCPT CHAR(1))
```