



Using ODBC from BATCH and BATCH from Windows

VG-BATCH Gateway Overview

VEGASOFT



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Introduction

- ◆ VG-BATCH Gateway is required component for
 - accessing ODBC-compliant databases via VG-ODBC Server
 - accessing BATCH environment from VG-Windows Client
 - VEGA BATCH tools
 - BATCH SQL Processor
 - DCL Generator

Options Table

- ◆ Core image equal to CA-IDMS environment
- ◆ Generated by macros
 - VGOPTH
 - VGOPTTE
 - VGOPTTF
- ◆ Load module
 - \$SQLOPTB

Options Table Source

```
VGOPTH SERVER='PROD1',DATEF='EP'  
  VGOPTF                               Profile #1  
  VGOPTF DLM=QUOTE                      Profile #2  
  VGOPTF  
  END
```

Options Table Load

```
//*      VG-BATCH GATEWAY INSTALLATION
//*      1. CREATE THE MEMBER BASCT00 USING BASCT$$ AS EXAMPLE
//*      2. COMPILE AND LINK THE SERVER CONTROL TABLE USING
//*          THE JCL BELOW
//ASSEM  EXEC  PGM=IEV90,PARM='LINECNT=50,DECK,NOOBJ,XREF(SHORT) '
//SYSPRINT DD SYSOUT=*
//SYSLIB DD DSN=VEGASOFT.SRCLIB,DISP=SHR
//SYSUT1 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SYSUT2 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SYSUT3 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SYSPUNCH DD DSN=&&PCH,DISP=(,PASS),UNIT=SYSDA,SPACE=(TRK,(6,2)),
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//SYSIN  DD DSN=VEGASOFT.SRCLIB(BASCT00),DISP=SHR INPUT
//LINK   EXEC  PGM=IEWL,PARM='XREF,LET,LIST,MAP,RENT,REUS '
//SYSPRINT DD SYSOUT=*
//SYSUT1 DD UNIT=SYSDA,SPACE=(TRK,(5,5))
//SYSLIN DD DSN=&&PCH,DISP=(OLD,DELETE)
//          DD *
        MODE AMODE(24),RMODE(24)
        NAME $SQLSCTB(R)
//SYSLMOD DD DSN=VEGASOFT.LOADLIB,DISP=SHR
```

Assemble and link edit
the Options Table.

Options Table List

```
VEGASOFT OY                TABLE LIST UTILITY                02/24/1999
                           OPTIONS TABLE ($SQLOPTB)
-----
CICS RELEASE.....: 0310
DB2 RELEASE.....: 0310
DATE FORMAT.....: AS
GENERATE IDMS COMMITS (DEFAULT).....: N
IDMS RELEASE.....: 1201
LINES PER PAGE.....: 44
MAXIMUM NUMBER OF COLUMNS.....: 256
MAXIMUM NUMBER OF CURSORS.....: 10
MAXIMUM NUMBER OF CURSOR VARIABLES.....: 1000
MAXIMUM NUMBER OF HOST VARIABLES IN PGM.....: 2048
MAXIMUM NUMBER OF HOST VARIABLES IN SQL STMT.: 600
MAXIMUM NUMBER OF INT SQL MODE CALLS.....: 999999999
MAXIMUM NUMBER OF WORD TABLE ENTRIES.....: 4800
PROGRAM SOURCE UPLOW.....: Y
PROGRAM SOURCE UPLOW.....: Y
RUNTIME ENVIRONMENT (DEFAULT).....: B
SERVER NAME (DEFAULT).....: TEST
```

Options Table contents
can be viewed
with the TABLIST
utility (BAINS051).

Options Table List

```
SQL KEYWORD (DEFAULT).....: SQL
SQLID (DB2).....:
TCPIPJOBNAME.....: TCPIP
```

```
NUMBER OF SQL PROFILES.....:      2
                                D STR DBMS PRE-
                                P DLM TYPE PARE
F  DATE          TIME          TIMESTAMP
-  ----          ----          -
1  01-JAN-92     01:01:01     01-JAN-92  01:01:01     .  '  ODBC YES
2  01-JAN-92     01:01:01     01-JAN-92  01:01:01     .  '  ODBC NO
```

Different profiles can be defined in the Options Table. Each profile defines a set of properties that are used at COBOL precompilation and COBOL program execution time. The profile that a server or a program will use is defined with the FORMAT keyword in the Server Control Table.

Server Control Table

- ◆ Core image equal to IDMS environment
- ◆ Generated by macros
 - VGSCTH
 - VGSCTE
 - VGSCTF
- ◆ Backup servers
- ◆ Load module
 - \$SQLSCTB

Server Control Table Source

```
VGSC TH
VGSC TE TYPE=2,SERVER=ORACLE1,RLU=(11,22,33,4), X
        MODE='TCP',TPN=1999, X
        USER='*****',PSWD='*****'
VGSC TE TYPE=2,SERVER='ORACLE01',RLU='VTAMLU01', X
        MODE='APPC01',TPN='VGS', X
        USER='*****',PSWD='*****'
VGSC TE TYPE=C,SERVER='*****',RLU='VTAMLU01', X
        MODE='APPC01',TPN='VGS', X
        USER='VGUSER',PSWD='ROSEBUD'
VGSC TE TYPE=2,SERVER='DB2',RLU='DSNT', X
        MODE='CAF'
VGSC TE TYPE=2,SERVER='DB2TRA',RLU='DSNT', X
        MODE='CAF',TRACE='mvs_job'
VGSC TE TYPE=2,SERVER='CICS',RLU='CICS02', X
        MODE='APPC01',TPN='D2S', X
        USER='VGUSER',PSWD='ROSEBUD'
VGSC TE TYPE=2,SERVER='CICSSYMB',RLU='TESTCICS', X
        USER='VGUSER',PSWD='ROSEBUD'
VGSC TF
        END
```

Server Control Table Load

```
//*      VG-BATCH GATEWAY INSTALLATION
//*      1. CREATE THE MEMBER BAOPT00 USING BAOPT$$ AS EXAMPLE
//*      2. COMPILE AND LINK THE OPTIONS TABLE USING THE JCL
//*      BELOW
//ASSEM  EXEC  PGM=IEV90,PARM='LINECNT=50,DECK,NOOBJ,XREF(SHORT) '
//SYSPRINT DD SYSOUT=*
//SYSLIB DD DSN=VEGASOFT.SRCLIB,DISP=SHR
//SYSUT1 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SYSUT2 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SYSUT3 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SYSPUNCH DD DSN=&&PCH,DISP=(,PASS),UNIT=SYSDA,SPACE=(TRK,(6,2)),
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//SYSIN  DD DSN=VEGASOFT.SRCLIB(BAOPT00),DISP=SHR INPUT
//LINK   EXEC  PGM=IEWL,PARM='XREF,LET,LIST,MAP,RENT,REUS '
//SYSPRINT DD SYSOUT=*
//SYSUT1 DD UNIT=SYSDA,SPACE=(TRK,(5,5))
//SYSLIN DD DSN=&&PCH,DISP=(OLD,DELETE)
//          DD *
        MODE AMODE(24),RMODE(24)
        NAME $SQLOPTB(R)
//SYSLMOD DD DSN=VEGASOFT.LOADLIB,DISP=SHR
```

Assemble and link edit
the Server Control
Table.

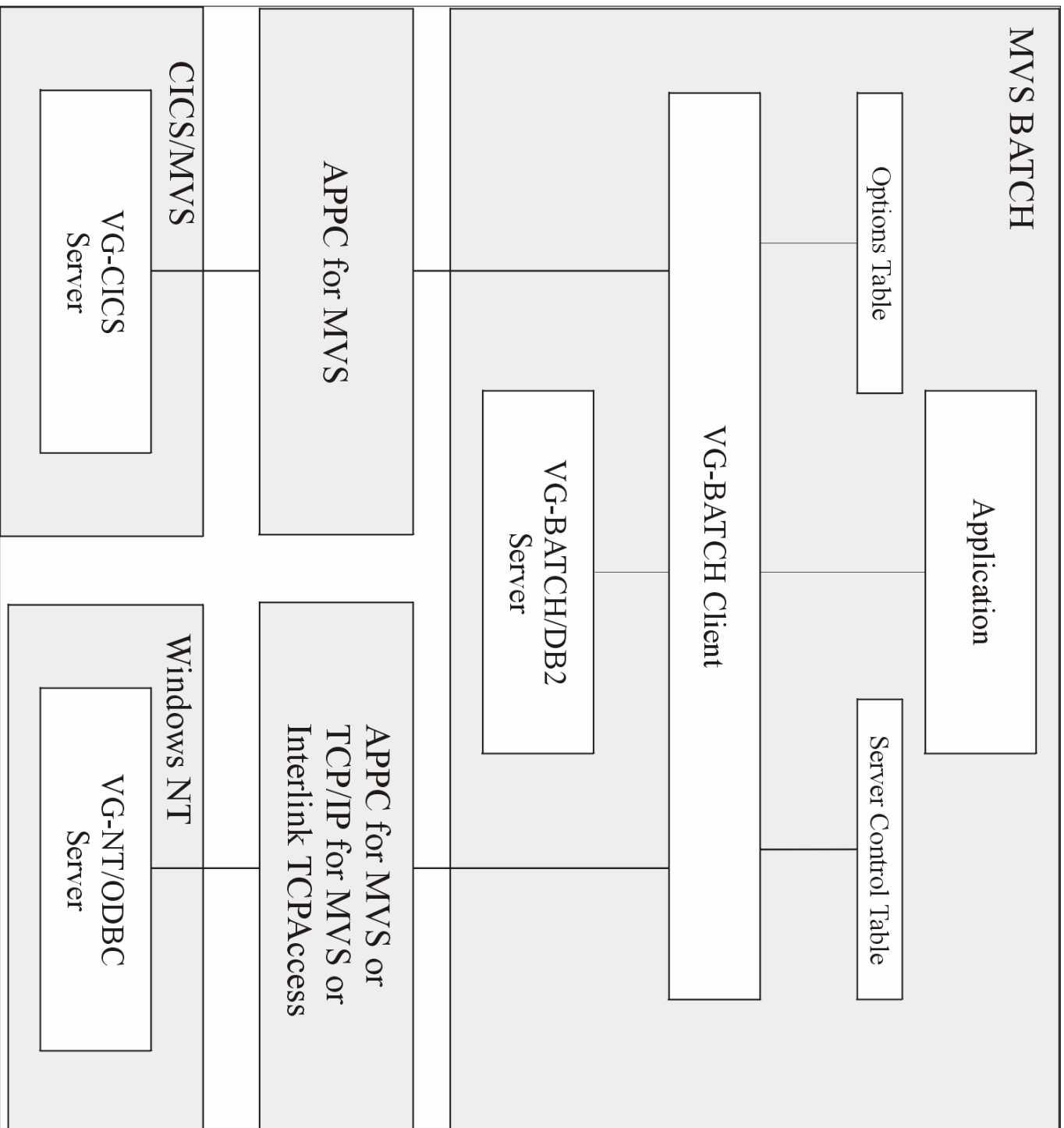
Server Control Table list

VEGASOFT OY		TABLE LIST UTILITY					02/24/1999	
SERVER CONTROL TABLE (\$SQLSCTB)								
		TCP/IP ADDRESS			PORT			
M	PGM/ID	RLU/SSN	MODEENTR	TASK	USERID	PASSWORD	TRACE	SIDN
2	TCPIPOK	197.89.20.172	BATCTCP	691		BLANK	*****	
2	TCPORA	197.89.5.34	BATCTCP	691	SCOTT	ASSIGNED		
P	*****	197.89.5.34	BATCTCP	691		BLANK	*****	
2	DB2	DSNT	BATCCAF			BLANK		
2	CICS	CICS02	APPC01	D2S	VG09100	ASSIGNED		
2	ORACLE7	LW000525	APPC01	OP	*****	*****		
2	SQLSERV	LW000525	APPC01	MP	*****	*****		
F	*****	DSNT	BATCCAF			BLANK	*****	
C	*****	CICS02	APPC01	D2S	VG09100	ASSIGNED	*****	
O	*****	LW000525	APPC01	OP	*****	***		
S	*****	LW000525	APPC01	MP	*****	***		
T	*****	LW000525	APPC01	MPTT	*****	***		
2	BACKTEST	LW000525	APPC01	D2S	*****	***		
2	BACKTEST	CICS02	APPC01	D2S	*****	*****		

Server Control Table contents can be viewed with the TABLIST utility (BAINS051).

Client/Server operations

- ◆ Most modules common with VG-IDMS Gateway
 - replaced IDCSACON hooks IDMS macros
 - e.g. #GETSTG -> GETMAIN
- ◆ Batch client
 - MSQCLIB
 - application stub MSQLBINT
- ◆ //VGLOG
 - messages





Batch Job Models

- ◆ BAINS02 Options Table load
- ◆ BAINS03 Server Control Table load
- ◆ BAINS051 Table List utility
- ◆ BAINS052 Batch SQL processor
- ◆ BAINS053 DCLGEN



End of Presentation

See
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