

Sterling Control Direct for z/OS



Quick Reference

Version 5.2

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Note

Before using this information and the product it supports, read the information in "Notices" on page 33.

This edition applies to Version 5 Release 2 of IBM Sterling Connect:Direct and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Notational Conventions

The following notational conventions are used throughout the IBM® Sterling Connect:Direct® for z/OS documentation.

Syntax or Symbol	Description
Bold letters	Boldface letters indicate required statements, labels, commands, or parameters.
Lowercase letters	Words in lowercase letters require substitution by the user.
UPPERCASE and lowercase letters	Uppercase letters in a statement, command, or parameter indicate an alternative to typing the entire command.
Underlined letters	Underlined letters indicate default values for parameters and subparameters.
	A vertical bar symbolizes “or.”
[]	Brackets indicate optional information.
,	Commas separate items within a list or set off the order of values specified as positional parameters. A comma must be used to indicate omission of a positional parameter.
=	Characters to the left of equal signs are keywords; characters to the right of equal signs are parameters.
()	Parentheses enclose lists and associate a group of values.
*	Asterisks indicate a generic specification of parameters. With generics, users can request information by specifying an asterisk (*) or a character string plus an asterisk (nnn*).
' '	Single quotation marks enclose special characters.
" "	Double quotation marks enclose symbolics within a quoted string.
\ \	Bracketing backslashes indicate special processing of a character string. They are used to continue a string containing special characters across multiple records or to ensure that quotation marks within the string are maintained.
	A double bar is used to concatenate character strings. A blank space is required before and after the double bar.
-	A hyphen is used to continue a statement across multiple records. A blank space is required before and after the hyphen.

Chapter 2. Sterling Connect:Direct Process Statements

A Process is a series of statements and parameters that perform data movement and manipulation activities.

These include:

- moving files between different Sterling Connect:Direct servers
- running jobs, programs, and commands on the Sterling Connect:Direct server
- starting other Processes
- monitoring and controlling Processes
- handling processing errors

Process Statement

Label	Statement	Parameters
Process name (required)	PROCCess	SNODE= secondary node name SNODE=TCPNAME=tcpvalue;port SNODE=UDT33NAM = udtvalue;port
		PNODE = primary node name %PNODE
		PNODEID = (id [,pswd] [,newpswd])
		SNODEID = (id [,pswd] [,newpswd])
		PACCT = 'pnode accounting data'
		SACCT = 'snode accounting data'
		CLASS = n
		CRC = (OFF ON)
		DEBUG = trace bits
		HOLD = Yes <u>No</u> Call
		MAXDELAY = [<u>Unlimited</u> <u>Queued</u> hh:mm:ss 0]
		NOTIFY = %USER userid
		PLEXCLASS = (pnode class, snode class)
		PRTY = n
		REQUEUE = Yes <u>No</u>
		RETAIN [®] = Yes <u>No</u> Initial
		SECURE=OFF SSL TLS10 TLS11 TLS12
		or
		SECURE=ENCRYPT.DATA=Y N
		or
SECURE = (OFF SSL TLS10 TLS11 TLS12 ENCRYPT.DATA=Y N)		
or		
SECURE = (OFF SSL TLS10 TLS11 TLS12 <cipher_suite> (cipher_suite_list),ENCRYPT.DATA=Y N)		
STARTT = ([date day][,hh:mm:ssxm])		
&symbolicName 1 = variable string 1		
&symbolicName 2 = variable string 2		
.		
.		
.		
&symbolicNamen = variable string n		

Note: If a variable contains blanks, you must enclose the string in quotation marks.

Intrinsic Variables

You can use the following intrinsic symbolic variables in a Process statement to substitute user-defined values when the Process is executed. This flexibility lets you use the same Process for multiple applications when these values change.

Value	Description
%DD2DSN	Specifies an allocated DD statement, which references a DSN to be passed to a Process being submitted. The format is %DD2DSN(ddname), where ddname refers to an allocated DD in the address space of the JCL submitting the Process. The DSN, including the member if specified, is substituted for this variable. The ddname may contain 1-8 characters.
%JDATE	Specifies the date the Process was submitted in Julian format. The variable is resolved as the submission date of the Process in the format yyyyddd. Among other uses, the value returned is suitable for constructing a file name on the node receiving the file. The value of the variable is resolved at Process submit time. The value will correspond to the date on which the Process was submitted, regardless of when or how many times the Process is actually executed.
%JOBID	Specifies the job number.
%JOBNM	Specifies the job name.
%JUSER	Specifies a variable that resolves to the USERID of the submitted job.
%NUM1	Specifies the submission time of the Process in minutes, seconds, and fraction of seconds in the format mmssth.
%NUM2	Specifies the submitted time of a Process as the low order 4 bits of the milliseconds of the time expressed as 1 hex digit (a value from 0 through 15 expressed as 0 through F).
%PNODE	Specifies the PNODE name where the submit occurs.
%PRAND	Use this parameter to generate a pseudo-random number (6 hex digits) that can be used to construct a unique data set name.
%SUBDATE	Specifies the date the Process was submitted in Gregorian format. The variable is resolved as the submission date of the Process in the format cyymmdd where c is the century indicator and is set to 0 for year 19yy or 1 for year 20yy. The value returned can be used to create a file name on the node receiving the file.
%SUBDATE1	Use this parameter to substitute the submitted date in the yyyyymmdd date format.
%SUBDATE2	Use this parameter to substitute the submitted date in the yyyyddmm date format.
%SUBDATE3	Use this parameter to substitute the submitted date in the mmdyyy date format.
%SUBDATE4	Use this parameter to substitute the submitted date in the ddmmyyyy date format.

Value	Description
%SUBTIME	<p>Specifies the time the process was submitted. The variable is resolved as the submission time of the process in the format hhmmss. The return value can be used to create a file name on the node receiving the file.</p> <p>The value of the variable is resolved at Process submit time. The value will correspond to the time at which the Process was submitted, regardless of when or how many times the Process is actually executed</p>
%USER	Specifies a variable that resolves to the user submitting the Process.

COPY Statement

Label	Statement	Parameters
[optional]	COPY	FROM (DSN = data set name/password FILE = file name
		<u>P</u> NODE SNODE
		DCB = ([model file name] [,BLKSIZE = number of bytes] [,DEN = 0 1 2 3 4] [,NCP = 0-255] [,DSORG = DA PO PS VSAM] [,KEYLEN = number of bytes] [,LIMCT = number of blocks or tracks] [,LRECL = number of bytes] [,OPTCD = W Q Z [,RECFM = record format] [,RKP = first-byte-of-rcd-key] [,TRTCH = C E T ET COMP NOCOMP]
		DISP = ([OLD <u>S</u> HR], [KEEP DELETE], [KEEP DELETE])
		RESGDG = <u>S</u> ub Run
		LABEL = ([file sequence number] [, <u>S</u> L AL BLP LTM NL] [, <u>P</u> ASSWORD NOPWREAD] [, <u>I</u> N <u>O</u> UT] [, <u>R</u> ETPD = nnnn EXPDT = [yyddd yyyy/ddd])
		MSVGP = MS group name
		UNIT = ([unit address device-type group name],[unit-count P])
		VOL = ([PRIVATE],[RETAIN] ,[volume-sequence-no] [,volume-count] [,SER = (serial-no[,serial-no,...])]) ([SER = (serial-no, [serial-no,...]) REF = dsn)
		ALIAS = <u>Y</u> N
		EXCLUDE = (generic member (startrange/stoprange) list)
		PDS.DIRectory = <u>Y</u> N
		<u>R</u> EPLACE NO <u>R</u> EPLACE
		SELECT=(member generic (*) (member, [new-name],[NR R]) (generic,, [NR R]) (start-range/stop-range,, [NR R]) list)
		BUFND=number
		IOEXIT=exit-name (exit-name [,parameter,...])

Label	Statement	Parameters
		DATAEXIT=exit-name (exit-name [,parameter,...])
		"DBCS = (tablename, so, si, PAD PAD = pc, LOGIC=A B (B,RC))" "codepage =(from code set, to Unicode code set)" "parameter1 [parameter2,...]" "datatype = text binary" "xlate = no yes" † "strip.blanks = yes no " † "precomp = yes no" DATATYPE = text binary † XLATE = no yes STRIP.BLANKS = no yes
)
		TO (DSN = data set name/password FILE = file name
		PNODE <u>S</u> NODE
		TYPE = typekey
		DCB = ([model file name] [,BLKSIZE = number of bytes] [,DEN = 0 1 2 3 4] [,NCP = 0-255] [,DSORG = DA PO PS VSAM] [,KEYLEN = number of bytes] [,LIMCT = number of blocks or tracks] [,LRECL = number of bytes] [,OPTCD = [W Q Z] [,RECFM = record format] [,RKP = first-byte-of-record-key] [,TRTCH = C E T ET COMP NOCOMP])
		DISP = ([<u>N</u> EW OLD MOD RPL SHR] ,[KEEP <u>C</u> ATLG] ,[KEEP <u>C</u> ATLG DELETE])
		AVGREC = U K M
		DATACLAS = data-class-name
		DSNTYPE = PDS LIBRARY BASIC LARGE EXTPREF EXTREQ
		KEYLEN = bytes
		KEYOFF = offset-to-key
		LIKE = model-data-set-name
		LRECL = bytes
		MGMTCLAS = management-class-name
		RECORG = KS ES RR LS
		SECMODEL = (profile-name [,GENERIC])
		STORCLAS = storage-class-name
		LABEL = ([file sequence number] ,[SL AL BLP LTM NL] ,[P <small>ASS</small> WORD NOP <small>W</small> READ] ,[IN OUT] ,[RETPD = nnnn EXPDT = [yyddd yyyy/ddd]])
		MSVGP = MS group name
		SPACE = (CYL TRK blk, (prim, [sec], [dir]) [RLSE], [CONTIG],[ROUND]) (avg-rec-len,(primary-rcds, [secondary-rcds], [dir]))

Label	Statement	Parameters
		UNIT = [(unit address device-type group name],[unit-count P])
		VOL = ([PRIVATE], [RETAIN], [volume-sequence-no], [volume-count] ,[volume-sequence-no] ,[volume-count] ,[SER = (serial-no[,serial-no,...])]) ([SER = (serial-no, [serial-no,...]) REF = dsn]
		BUFND = number
		IOEXIT = exit-name (exit-name [,parameter,...])
		DATAEXIT = exit-name (exit-name [,parameter,...])
		SYSOPTS = "UNIQUE=YES" "DBCS = (tablename, so, si, PAD PAD = pc, LOGIC=A B (B,RC))" "codepage =(from code set, to Unicode code set)" "parameter1 [parameter2,...]" "datatype = <u>text</u> binary" † "xlate = <u>no</u> yes" † "strip.blanks = yes <u>no</u> " † "permiss = nnn" † DATATYPE = text binary XLATE = <u>no</u> yes STRIP.BLANKS = <u>no</u> yes PERMISS = nnn ZIIP=ON OFF ZEDC=OFF ON
)
		CKPT = nK nM
		COMPRESS [[PRIMEchar = X'40' X'xx' C'c'] EXTended]
		ZFBA = 2
† = HFS File Only		

RUN JOB Statement

Label	Statement	Parameters
[optional]	RUN JOB	(DSN = dsn[(member)]) <u>P</u> NODE <u>S</u> NODE

RUN TASK Statement

Label	Statement	Parameters
[optional]	RUN TASK	(PGM = program name, PARM = (parameter, [,parameter, ...])) SYSOPTS = "parameter [,parameter, ...]" <u>P</u> NODE <u>S</u> NODE

Run Task Utility Programs and Parameters

Program	Parameters
DGADTIFY	CL4'GOOD' CL4'FAIL' file name

Program	Parameters
DGADTFY2	CL4'GOOD' CL4'FAIL' file name user ID user ID list
DGADTDYN	ALLOC UNALLOC CONCAT DECONCAT LOCATE
DGADTAMS	sysprint output parameters control statement parameters
DGADTSUB	JCL source subsequent parameters
DGADGSUB	%SRCDSN %DSTDSN %PROCNAME %PROCNUM

SUBMIT Statement

Label	Statement	Parameters
[optional]	SUBmit	DSN = dsn[(member)]
		CASE = Yes <u>No</u>
		CLASS = n
		DEBUG = trace bits
		HOLD = Yes No Call
		NEWNAME = newname
		NOTIFY = %USER userid
		PACCT = 'pnode accounting data'
		PLEXCLASS = (pnode class, snode class)
		PNODEID = (id[,pswd][,newpswd])
		PRTY = n
		QUEUE = Yes <u>No</u>
		RETAIN = Yes <u>No</u> Initial
		SACCT = 'snode accounting data'
		SNODE = secondary node SNODE=TCPNAME = tcpvalue;port
		SNODEID = (id [,pswd] [,newpswd])
		STARTT = ([date day] [,hh:mm:ssxm])
		SUBNODE = <u>PNODE</u> SNODE

Note: If a variable string contains blanks, you must enclose the string in quotation marks.

SYMBOL Statement

Label	Statement	Parameter
[optional]	SYMBOL	&symbolic_name = variable-string

Modal Statements

Label	Statement	Parameters
[optional]	IF	(label condition nn)
	THEN	(process steps)
[no label]	ELSE	(alternative process steps)
[no label]	EIF	[none]
[optional]	GOTO	statement label
[no label]	EXIT	[none]

Chapter 3. Sterling Connect:Direct Commands

Use Sterling Connect:Direct commands to submit and manipulate Processes stored in the Transmission Control Queue (TCQ). For example, you can select, delete, and suspend Processes by using Sterling Connect:Direct commands.

Modify Command

Label	Command	Parameters
[optional]	MODIFY †	BITS.OFF = X'nnnnnnnn'
	†	BITS.ON = X'nnnnnnnn'
		CLOSE = ddname
		DDNAME = (ddname,nn)
	†	DEBUG = trace bits
		DYN = 'dynamic allocation string'
		INITPARMS
		MODDIR.TRACE = YES
		NODE.TRACE.BITSOFF=(node name, X'nnnnnnnn')
		NODE.TRACE.BITSON=(node name, X'nnnnnnnn')
	†	NODE.TRACE.ON = (node name, debug bits)
	†	NODE.TRACE.OFF = node name
		SESSIONS = Quiesce Resume (WHERE(NODE=node name))
		WHERE(SERVER = server name)
		ZIIP = NONE EXTCOMP SSLTLS ALL PROJECT
	ZEDC = ON OFF	
	ZFBA = YES NO	
† The BITS.ON, BITS.OFF, DEBUG, and NODE.TRACE parameters affect debug traces. See Trace Types for a list of trace bits.		

Network Map Commands

Command	Parameters
\$\$INSERT ADJACENT.NODE =	<pre> ((nodename, communications name channel-range-start-addr, remote library name IP address or Alias addr-count, session type security node type, data direction restriction) PARSESS = (max,default) ZFBA=(addr1,addr2) COMPRESS.EXT=ALLOW DISALLOW FORCE COMPRESS.STD=ALLOW DISALLOW FORCE COMPRESS.STD.PRIMECHAR=C'x' X'xx' SOURCEIP=IP address SESS.SNODE.MAX = (1-255) LDNS=hostname LOGMODE=logmode entry name APPLIDS=(vtam applid1 [,vtam applid2,...]) BATCHAPPLIDS=(batch.applid1 [,batch.applid2,...]) TSO.APPLIDS=(tso.applid1 [,tso.applid2,...]) INTERACTIVE.APPLIDS=(interactive.applid1 [,interactive.applid2,...]) CICS.APPLIDS=(cics.applid1 [,cics.applid2,...]) NETID=networkid CTCA server name PNODE.LUS=(luname1 [,luname2,...]) SNODE.LUS=(luname1 [,luname2,...]) USE.SERVER.NODE = NO YES TCPAPI= (port number, IP address) CRC = (OFF ON DEFAULT) PLEXCLASS= (* plexclass, * plexclass) BUFFER.SIZE= (3072-262144 3K-256K) (ALTernate.COMMinfo = (ALTernate.RESTART=<u>No</u> Yes, ALTernate.DIRection=<u>BALANCE</u> TOP, (ALTernate.ADDRess= ALTernate.NODEDEF=, ALTernate.PORT=, SOURCEIP=outbound IP address ALTernate.TYPE=SNA TCP UDT33 LU62, ALTernate.LOGmode entry name=, ALTernate.USE.OUTbound=<u>Yes</u> No)) CDFTP.PLUGIN="name or location of the plugin" CDFTP.TEMPFILE="fully qualified file path and name" CONTACT.NAME="name" CONTACT.PHONE="phone information" DESCRIPTION="description information") </pre>
\$\$UPDATE ADJACENT.NODE =	Same parameters as \$\$INSERT ADJACENT.NODE
\$\$REPLACE ADJACENT.NODE =	Same parameters as \$\$INSERT ADJACENT.NODE
\$\$DELETE ADJACENT.NODE =	Same parameters as \$\$INSERT ADJACENT.NODE
\$\$BLKDELETE ADJACENT.NODE =	Same parameters as \$\$INSERT ADJACENT.NODE
. . \$\$ENDDELETE	

Command	Parameters
\$\$BLKINSERT ADJACENT.NODE = . . \$\$ENDINSERT	Same parameters as \$\$INSERT ADJACENT.NODE
\$\$BLKUPDATE ADJACENT.NODE = . . \$\$ENDUPDATE	Same parameters as \$\$INSERT ADJACENT.NODE
\$\$SYNTAX . . \$\$ENDSYNTAX	Same parameters as \$\$INSERT ADJACENT.NODE
\$\$VERIFY ADJACENT.NODE = . . \$\$ENDVERIFY	Same parameters as \$\$INSERT ADJACENT.NODE

Label	Command	Parameters
[optional]	SElect NETMAP	WHERE (NODE = (node generic (list))) PRINT TABLE <u>DISplay</u>
[optional]	SElect TCPXLAT	WHERE (TRTCPNAM = (tcpip.host.name (list))TRTCPADR = (tcp.net.adr (list))) PRINT <u>DISplay</u>

Process Commands

Label	Command	Parameters
[optional]	CHange PROCess	WHERE (NODE = nodename (list) PNAME = name (list) PNUMBER = number (list) SUBmitter = (nodename,userid) (list)) CASE = Yes <u>No</u> CLASS = n DEBUG = trace bits DEST= destination node HOLD = YES <u>NO</u> CALL NETMAP.REFRESH PLEXCLASS = (pnode plexclass snode plexclass) PRTY = 0 to 15 RELEASE RESTART = [NO FIRST = vol.seq.number FIRST = SER = vol.ser.number LAST = vol.seq.number LAST = SER = vol.ser.number VOLCNT = n] RETAIN = YES <u>NO</u> INITIAL STARTT = ([date day][,hh:mm:ssXM])
[optional]	DELEte PROCess	WHERE (PNAME = name (list) PNUMBER = number (list) SUBmitter = (nodename,userid) (list)) CASE = Yes <u>No</u>
[optional]	FLUSH PROCess	WHERE (PNAME = name (list) PNUMBER = number (list) SUBmitter = (nodename,userid) (list)) FORCE CASE = Yes <u>No</u>
[optional]	SELEct PROCess	WHERE (DEST = node (list) PNAME = name (list) PNUMBER = number (list) QUEUE = <u>All</u> queue name SERVER=server name STATUS = process status (list) SUBmitter = (nodename,userid) (list)) CASE = Yes <u>No</u> FILE PPrint <u>TABLE</u>
[optional]	SUSpend PROCess	WHERE (DEST = node (list) PNAME = name (list) PNUMBER = number (list) QUEUE = <u>All</u> queue name STATUS = process status (list) SUBmitter = (nodename,userid) (list)) CASE = Yes <u>No</u>

Label	Command	Parameters
[optional]	View PROCess	WHERE (DEST = node (list) PNAME = name (list) PNUMBER = number (list) QUEUE = All queue name SERVER=server name STATUS = process status (list) SUBmitter = (nodename,userid) (list)) CASE = Yes No FILE PPrint <u>TABLE</u>

Signon, Signoff, Stop, and Swap Commands

Label	Command	Parameters
[optional]	SIGNON	NETMAP = network map data set name CASE = Yes <u>No</u> COMADDR = (port number, IP address alias name) ESF = <u>Yes</u> No FOLD = Yes <u>No</u> NODE = nodename PACCT = 'pnode accounting data' PRINT = destination of printed spool output RECONNECT SACCT = 'snode accounting data' SPACE = (<u>CYL</u> TRK blk,([prim],[sec])) TMPDD = preallocated data set dd name TMPDSN = preallocated data set name TRANSPORT = SNA TCP <u>NETMAP</u> UNIT = temporary dsn unit type USERID = (id,pswd,newpswd) VOLSER = volume serial
[optional]	SIGNOFF	
[none]	STOP CD	[FORCE IMMEDIATE <u>QUIESCE</u> STEP] [CDPLEX WHERE(SERVER = server name)] RECOVER
[optional]	SWAP NODE	nodename

Task Commands

Label	Command	Parameters
[optional]	FLUSH TASK	WHERE (TASK = taskno (list) , SERVER = server name) FORCE

Label	Command	Parameters
[optional]	SElect TASK	PRInt Operator table DISPlay
		WHERE (SERVER = server name)

Type Commands

Label	Command	Parameters
[optional]	INSert TYPE	TYPEKEY = typekey DCB = ([BLKSIZE = number of bytes ,DSORG = [DA PS PO VSAM] ,LRECL = number of bytes ,RECFM = record format]) DISP = ([NEW OLD MOD RPL SHR] [,KEEP ,CATLG ,DELETE] [,KEEP ,CATLG ,DELETE]) DSNATYPE = PDS LIBRARY BASIC LARGE EXTPREF EXTREQ AVGREC = (U K M) DATACLAS = data class name EATTR = OPT NO blanks KEYLEN = bytes KEYOFF = offset to key LIKE = model data set name LRECL = bytes MGMTCLAS = management class name RECORG = (KS ES RR LS) SECMODEL = (profile name [, GENERIC]) STORCLAS = storage class name SPACE = (CYL TRK blk, (prim, sec, (dir)) (,RLSE , (CONTIG ,) (ROUND)) (ave_rec_len, (primary_rcds, secondary_rcds)) UNIT = unit type VOL=SER = volume serial number IOEXIT = exitname (exitname{,parm,...})
[optional]	UPDate TYPE	Same parameters as INSert TYPE
[optional]	DELeTe TYPE	WHERE (TYPEKEY = typekey generic (list)) PRInt <u>TABLE</u>
[optional]	SElect TYPE	WHERE (TYPEKEY = typekey generic (list)) PRInt <u>TABLE</u>

User Commands

Label	Command	Parameters
[optional]	INSert User	USERID = (nodename,userid)
		NAME = 'user name'
		ADD TYPE = Y <u>N</u>
		ALTER TYPE= Y <u>N</u>
		READ TYPE = Y <u>N</u>
		REMOVE TYPE = Y <u>N</u>
		ADD USER = Y <u>N</u>
		ALTER USER = Y <u>N</u>
		READ USER = Y <u>N</u>
		REMOVE USER = Y <u>N</u>
		CASE = YES <u>NO</u>
		CHANGE = Y <u>N</u>
		COPY = Y <u>N</u>
		DELPR = Y <u>N</u>
FLUSH = Y <u>N</u>		
	+	GEN.CHG.PROCESS = Y <u>N</u>
	+	GEN.DEL.PROCESS = Y <u>N</u>
	+	GEN.FLS.PROCESS = Y <u>N</u>
	+	GEN.SEL.PROCESS = Y <u>N</u>
	+	GEN.SEL.STATISTICS = Y <u>N</u>
	+	CDEL = Y <u>N</u>
	+	CDELOFF = Y <u>N</u>

Label	Command	Parameters
		MAXSA = max. signon attempts
		MODALS = Y <u>N</u>
		MODIFY = Y <u>N</u>
		NSUBMIT = Y <u>N</u>
		OVCRC = Y <u>N</u>
		PASSword = initial password
		PHone = 'phone number'
		PTICDATA = (APPL profile name, secured signon key)
		RESETSA
		RUNJOB = Y <u>N</u>
		RUNTASK = Y <u>N</u>
		SECURITY = (security id, security pswd)
		SECUREWR = Y <u>N</u>
		SELNET = Y <u>N</u>
		SELPR = Y <u>N</u>
		SELSTAT = Y <u>N</u>
		STATCMD = Y <u>N</u>
		STOP CD = Y <u>N</u>
		SUBMIT = Y <u>N</u>
	‡	SUBMITTER.CMDS = (Y <u>N</u> Y <u>N</u> Y <u>N</u> Y <u>N</u> Y <u>N</u>)
		UPDNET = Y <u>N</u>
		VIEWPROCESS = Y <u>N</u>
[optional]	DELEte USER	WHERE (USERID = (nodename,userid) (list)) CASE = Yes <u>No</u>
[optional]	SELEct USER	WHERE (USERID = (nodename,userid) (generic (list)) EXCLUDE = (AUTH)) PRint <u>TABLE</u> CASE = Yes <u>No</u>
† Valid in the Sterling Connect:Direct IUI only.		
‡ Valid in the batch interface only.		

Inquire Commands

Label	Command	Parameters
[optional]	INQUIRE CDPLEX	
[optional]	INQUIRE DEBUG	WHERE (SERVER = server name)
[optional]	INQUIRE INITparm	WHERE (SERVER = server name)
[optional]	INQUIRE SNMP	
[optional]	INQUIRE STATDIR	STARTT = ([date day] [,hh:mm:ssXM])

Label	Command	Parameters
[optional]	INQUIRE STATISTICS	
[optional]	INQUIRE TCP	

Statistics Commands

Label	Command	Parameters
[optional]	STATISTICS SWITCH	
[optional]	STATISTICS ON OFF	TYPE = (record type list)
[optional]	STATISTICS ARCHIVED	file pair number
[optional]	SELECT STATISTICS	WHERE (CCODE = (condition, completion code EXCLUDE = (MEMBER MCR) (WTO) (NOTWTO) (list) MSGID = ID (list) PNAME = name (list) PNUMBER = number (list) SERVER = server name STARTT = ([date day] [,hh:mm:ssXM]) STOPT = ([date day] [,hh:mm:ssXM]) USER = name (list) SNODE = name (list) TYPE = ID (list) FNAME = dsname (list) * CASE = YES NO ARCHDSN = dsname (list)) FILE PRINT <u>TABLE</u> SUMMARY
[optional]	SELECT MESSAGE	WHERE (IDMSGID=message ID) [Short Long](

Submit Command

Label	Command	Parameters
[optional]	SUBmit	PROC = member or DSN = dsn dsn(member)
		CASE = YES <u>NO</u>
		CLASS = n
		DEBUG = trace bits
		HOLD = YES <u>NO</u> CALL
		MAXDELAY = <u>Unlimited</u> Queued hh:mm:ss 0
		NEWNAME = newname
		NOTIFY = %USER userid
		PACCT = 'Pnode accounting data'
		PLEXCLASS = (pnode class, snode class)
		PNODE = primary node name
		PNODEID = (id,pswd,newpswd)
		PRTY = 0 - 15
		REQUEUE = YES <u>NO</u>
		RETAIN = YES <u>NO</u> INITIAL
		SACCT = 'snode accounting data'
		SNODE = secondary node name SNODE=TCPNAME UDT33NAM = tcpvalue;port
		SNODEID = (id,pswd,newpswd)
		STARTT = ([date day] [,hh:mm:ssXM])
		SUBNODE = PNODE SNODE
		&symbolic name 1 = variable string1
		&symbolic name 2 = variable string2
		...
		&symbolic name n = variable string n

Note: If a variable string contains blanks, you must enclose the string in quotation marks.

Chapter 4. Network Map Parameters

Node Type	Parameters
LOCAL.NODE =	((nodename, communications name, , superuserpassword) TCQ = (tcxdsn,tcqdsn))
ADJACENT.NODE =	((nodename, - communications name channel-range-start-addr, - remote library name IP address or Alias addr-count, - session type - security node type, - data direction restriction) - PARSESS = (max,default) - ZFBA = (Addr1, Addr2) COMPRESS.EXT=ALLOW DISALLOW FORCE - COMPRESS.STD=ALLOW DISALLOW FORCE - COMPRESS.STD.PRIMECHAR=C'x' X'xx' - SOURCEIP=IP address - SESS.SNODE.MAX = (1-255) - LDNS=hostname - LOGMODE=logmode entry name - APPLIDS=(vtam applid1 [,vtam applid2,...]) - BATCHAPPLIDS=(batch.applid1 [,batch.applid2,...]) - TSO.APPLIDS=(tso.applid1 [,tso.applid2,...]) - INTERACTIVE.APPLIDS= (interactive.applid1 [, interactive.applid2,...]) - CICS.APPLIDS=(cics.applid1 [,cics.applid2,...]) - NETID=networkid CTCA server name - PNODE.LUS=(luname1 [,luname2,...]) - SNODE.LUS=(luname1 [,luname2,...]) - USE.SERVER.NODE = NO YES - TCPAPI= (port number, IP address) - CRC = (OFF ON DEFAULT) - PLEXCLASS= (* plexclass, * plexclass) - BUFFER.SIZE= (3072-262144 3K-256K) (ALternate.COMMinfo = (ALternate.RESTART= <u>No</u> Yes, ALternate.DIRction= <u>BALANCE</u> TOP, - (ALternate.ADDRess= ALternate.NODEDEF=, ALternate.PORT=, SOURCEIP=outbound IP address - ALternate.TYPE=SNA TCP UDT33 LU62, ALternate.LOGmode entry name=, - ALternate.USE.OUTbound= <u>Yes</u> No)) - CDFTP.PLUGIN="name or location of the plugin" - CDFTP.TEMPFILE="fully qualified file path and name" - CONTACT.NAME="name" - CONTACT.PHONE="phone information" - DESCRIPTION="description information" -)

Chapter 5. Initialization Parameter Overview

Initialization parameters supply values for various Sterling Connect:Direct functions. Sterling Connect:Direct processes these parameters during initialization.

Global Initialization Parameters

Global Initialization Parameters	Default Values
ABEND.CODES.NODUMP = (abend code list)	no abend codes
ABEND.RUNTASK = (DUMP ABEND.CODES.NODUMP)	DUMP
ALLOC.CODES = (allocation errors)	(020C 0210 0218 0220 0234 0068 0069 006A)
ALLOC.MSG.LEVEL = INFO WARN SEVERE	INFO
ALLOC.RETRIES = no. retries	20
ALLOC.WAIT = hh:mm:ss	00:03:00
ALLOCATION.EXIT = modname	No allocation exit
CDPLEX = <u>NO</u> YES	NO
CDPLEX.MAXSERVER = maximum number of servers <u>4</u>	4
CDPLEX.TIMER = <u>5</u> number of minutes	5
CDPLEX.WLM.GOAL = (<u>NO</u> YES, exitname)	NO
CHECK.CERT.EXPIRE = <u>NO</u> YES	NO
CHECK.CERT.EXPIRE.TIME = <u>00:00:00</u> HH:MM:SS	<u>00:00:00</u> (midnight)
CHECK.CERT.EXPIRE.WARN.DAYS = <u>30</u> nnn	30 days
CKPT = nK nM	none
CKPT.DAYS = number of days	4
CKPT.MODE = (<u>RECORD</u> BLOCK BLOCK <u>RECORD</u> <u>PDS</u> NOPDS NOPDS <u>PDS</u> <u>VSAM</u> NOVSAM VSAM <u>NOVSAM</u>)	RECORD BLOCK PDS NOPDS VSAM VSAM
COMPRESS.EXT = <u>ALLOW</u> DISALLOW	ALLOW
COMPRESS.NEGO.FAIL = <u>STEP</u> PROCESS	STEP
COMPRESS.NETMAP.OVERRIDE = <u>ALLOW</u> DISALLOW	ALLOW
COMPRESS.STD = <u>ALLOW</u> DISALLOW	ALLOW
CONFIRM.COLD.START = YES <u>NO</u>	NO
CRC = (<u>OFF</u> ON, <u>Yes</u> No)	OFF, Yes
CTCA = YES <u>NO</u>	NO
CTCA.TIMER = number of seconds to wait when establishing a CTCA connection	180
DATEFORM = (<u>MDY</u> DMY YMD YDM)	MDY

Global Initialization Parameters	Default Values
DEBUG = nnnnnnnn	00000000
DESC.CRIT = (descriptor code)	2
DESC.NORM = (n, n, ...)	none
DESC.TAPE = (n, n, ...)	2
DSNTYPE = YES <u>NO</u>	NO
ECZ.COMPRESSION.LEVEL = <u>1</u> 2 3 4 5 6 7 8 9	1
ECZ.MEMORY.LEVEL = 1 2 3 <u>4</u> 5 6 7 8 9	4
ECZ.WINDOWSIZE = 8 9 10 11 12 <u>13</u> 14 15	13
ESF.WAIT = hh:mm:ss	00:03:00
EXPDT = TT DD TD DT ALL <u>NONE</u> (TT,DD,TD,DT)	NONE
EXTENDED.RECOVERY = <u>NO</u> YES	NO
FIPS = YES <u>NO</u>	NO. If FIPS = YES, you must specify a filename for the SECURE.DSN initialization parameter.
GDGALLOC = GENERATION <u>DSNAME</u>	DSNAME
GDGENQ = YES <u>NO</u>	NO
IMMEDIATE.SHUTDOWN = <u>I</u> R	I
INITPARM.BACKUP = member	none
INVOKE.ALLOC.EXIT = SEND <u>RECV</u> BOTH	RECV
INVOKE.ALLOC.EXIT.ON.RESTART = <u>NO</u> YES	NO
INVOKE.SPOE.ON.SNODEID = <u>NO</u> YES	NO
MAX.AGE = (number of days the entries are left in TCQ, ALL <u>HE</u> HO HP HS PR RA RH)	number of days = 0, HE
MAX.AGE.TOD = time	midnight and initialization
MAXBATCH = number of users	MAXUSERS value
MAXPRIMARY = number of primary sessions	6
MAXPROCESS = number of executing PNODE plus SNODE Processes	MAX-PRIMARY plus MAX-SECONDARY
MAXRETRIES = number of retries	7
MAXSECONDARY = number of secondary sessions	6
MAXSTGIO = max. storage in bytes for nontape sequential data set transfers	61440
MAX.TAPE = number of tape Processes NONE	10
MAXUSERS = number of users	6
MCS.CLIST = Operator interface CLIST library name	none
MCS.SIGNON = [SIGNON USERID = (userid, password) NETMAP = network map]	none
MULTI.COPY.STAT.RCD = not set CT MC M2	not set
NETMAP.CHECK = NO (<u>ALL</u> TCP, <u>ALL</u> BOTH NODENAME, <u>FAIL</u> WARN PASS)	ALL ALL FAIL
NETMAP.CHECK.ON.CALL= YES <u>NO</u>	NO
NODE QUIESCE.OFF = NODENAME	none
NODE QUIESCE.ON = NODENAME	none

Global Initialization Parameters	Default Values
NODE.TRACE.OFF = NODENAME	none
NODE.TRACE.ON = NODENAME	none
NON.SWAPABLE = YES NO	none
PDSE.SHARING = YES <u>NO</u>	NO
PDSENQ = YES <u>NO</u>	NO
PROCESS.RETENTION = YES <u>NO</u>	NO
PRTYDEF = Process default priority	10
QUIESCE = YES <u>NO</u>	NO
QUIESCE.NODE = nodename	none
REMOTE.DUMMY.PASSWORD = [<u>YES</u> INTERNAL]	YES
REQUEUE = YES <u>NO</u>	NO
RESET.ORIGIN.ON.SUBMIT = YES <u>NO</u>	NO
REUSE.SESIONS = <u>YES</u> NO	YES
ROUTCDE.CRIT = (route code)	(8,11)
ROUTCDE.NORM = (route code)	11
ROUTCDE.TAPE = (route code)	(5, 11)
RUN.JOB.EXIT = modname	none
RUNJOBID = <u>USER</u> CD	USER
RUN.TASK.EXIT = modname	none
RUNTASK.RESTART = YES <u>NO</u>	NO
S+CMD.ENFORCE.SECURE.CONNECTION = <u>YES</u> NO	YES
SECURE.DSN = filename	none. If the FIPS initialization parameter is set to YES, a filename must be specified for the SECURE.DSN parameter.
SECURE.SSL.PATH.PREFIX = prefix	none
SECURITY.EXIT = (modname, DATASET ALL, PSTKT) OFF SECURITY = (modname, DATASET ALL, PSTKT) OFF	C:D Authorization Facility
SECURITY.NOTIFY = YES <u>NO</u> HOLD	NO
SNA = <u>YES</u> NO	YES
SNMP = YES <u>NO</u>	NO
SNMP.DSN = data set name data set name (member)	none
SNMP.MANAGER.ADDR = hostname IP address	IP address or hostname
SNMP.MANAGER.PORTNUM = port-number	162
STAT.ARCH.CONFIRM = YES <u>NO</u>	NO
STAT.BUFFER.ESDSDATA = number of ESDS data buffers STAT.BUFFER.KSDSDATA = number of KSDS data buffers STAT.BUFFER.KSDSINDX = number of KSDS index buffers	6
STAT.ERROR = <u>ABEND</u> DISABLE	ABEND
STAT.EXCLUDE = (record type list)	none
STAT.INIT = <u>WARM</u> COLD	WARM
STAT.QUEUE.ELEMENTS = statistics record queue size	100

Global Initialization Parameters	Default Values
STAT.SNODEID = (NO YES,NO YES)	(NO,YES)
STAT.SWITCH.SUBMIT = dsn [member]	none
STAT.SWITCH.TIME = (hh:mm:ss, ...)	none
STAT.TPREC = (start_time, end_time, snaps_per_hour)	none
STAT.USER = (userid, [password])	Security ID of DTF region
STATISTICS.EXIT = module name (modname[<u>MANAGER</u>] [<u>SERVER</u>] [<u>BOTH</u>])	none
STRNO.MSG = number <u>5</u>	5
SUBMIT.EXIT = modulename	none
SYSOUT = class	none
TAPE.PREMOUNT = YES <u>NO</u> LIST	NO
TAPEIO = <u>EXCP</u> BSAM	EXCP
TAPEMOUNT.EXIT = modname	none
TCP = OES <u>NO</u>	NO
TCP.API.LISTEN = ((addr1 , port1) , (addrn , portn))	If the parameter is specified with an address only, the port can default. The default port is 1363.
TCP.API.TIMER = <u>00:00:00</u> hh:mm:ss	00:00:00 meaning that no timer is used.
TCP.CONNECT.TIMEOUT = <u>0</u> number of seconds	0
TCP.FMH.TIMER = hh:mm:ss	0
TCP.LISTEN = ((addr1 , port1) , (addrn , portn))	If the parameter is specified with an address only, the port can default. The default port is 1364.
TCP.RUNTASK.TIMER = hh:mm:ss	0
TCP.SRC.PORTS = (ip.address,port-ranges),(ip.address2,port1,port2), - (ip.address3,port-ranges) TCP.SRC.PORTS = (ip.address/submask,port-ranges), ... TCP.SRC.PORTS = (ip.address/0xFFFFFFFFFFFFFFFF,ports,ranges)	none
TCP.SRC.PORTS.LIST.ITERATIONS = number of scans	none
TCP.TIMER = wait time	0
TCQ = <u>WARM</u> COLD	WARM
TCQ.THRESHOLD = <u>NO</u> YES nn	NO
THIRD.DISP.DELETE = <u>YES</u> NO	YES
TRACE.BUFFER = nnn <u>2</u>	2 MB
TRANS.SUBPAS = <u>YES</u> NO	YES
UDP.SRC.PORTS = (ip.address,port-ranges),(ip.address2,port1,port2), - (ip.address3,port-ranges)	none
UDP.SRC.PORTS.LIST.ITERATIONS = number of scans	none
UDT = YES <u>NO</u>	NO
UDT.MAXPROCESS = <u>2</u> number of executing UDT Processes	2
UDT33.LISTEN = ((ipaddr,port)[,(ipaddr,port)...])	The default port is 1366.
UPPER.CASE = YES <u>NO</u>	NO

Global Initialization Parameters	Default Values
V2.BUFSIZE = (maximum transmission buffer size, TCP/IP send/receive buffer size)	4K, double the first parameter
WTMESSAGE = <u>NO</u> YES (YES, nnn)	NO
WTRETRIES = hh:mm:ss <u>00:3:00</u>	00:03:00
XCF.NAME = XCF group name	NONE
ZEDC = ON or <u>OFF</u>	OFF
ZEDC.EXCLUDE=(D DB F FB V VB U)	NONE
ZFBA = YES or <u>NO</u>	NO
ZIIP = <u>NONE</u> EXTCOMP SSLTLS ALL PROJECT	NONE
ZIIP.EXTCOMP.DATASIZE.THRESHOLD = 1024	1024

System File Initialization Parameters

System File Initialization Parameters
AUTHDSN = dsn
CKPTDSN = dsn
MSGDSN = dsn
NETDSN = dsn
STAT.ARCH.DIR = archive directory dsn
STAT.DSN.BASE = dsn base STAT.FILE.PAIRS = number
TYPEDSN = dsn

Local Initialization Parameters

Local Initialization Parameters	Default Values
CDPLEX.INITPARM.BACKUP = member	none
CDPLEX.MANAGER = <u>NO</u> YES	NO
CDPLEX.MSGID = <u>NONE</u> xx	NONE
CDPLEX.PLEXCLASSES = (*,plexclass, ..., plexclass)	*
CDPLEX.REDIRECT = ((INT_IPv4,EXT_IPv4),(INT_IPv6,EXT_IPv6), (INT_UDT_IPv4,EXT_UDT_IPv4),(INT_UDT_IPv6,EXT_UDT_IPv6))	Defaults to the first IPV4 or IPV6 address for the server.
CDPLEX.REDIRECT.EXCEPTION = ((Mgr-IP, Svr-IP, Svr-port, Exception-IP, Exception-port),...)	none
CDPLEX.SERVER = Sterling Connect:Direct/Server name	none
CDPLEX.SERVER.JOBDSN = data set name	none
CDPLEX.SERVER.JOBMEM = ((member name, server name), ...)	none
CDPLEX.SERVER.NODE = nodename	none
CDPLEX.TIMER = <u>5</u> number of minutes	5
CDPLEX.VTAM = (VTAM-APPL, P/S-Node-APPL)	none
CTCA = YES <u>NO</u>	NO

Local Initialization Parameters	Default Values
CTCA.TIMER = number of seconds to wait when establishing a CTCA connection	180
DEBUG = nnnnnnnn	00000000
MAXBATCH = number of users	MAXUSERS value
MAXPRIMARY = number of primary sessions	6
MAXPROCESS = number of executing PNODE plus SNODE Processes	MAX-PRIMARY plus MAXSECONDARY
MAXSECONDARY = number of secondary sessions	6
MAX.TAPE = number of tape Processes	10
QUIESCE = YES <u>NO</u>	NO
SECURITY.EXIT = (modname,DATASET ALL,PSTKT) OFF	C:D Authorization Facility
SECURITY = (modname,DATASET ALL,PSTKT) OFF	
SNA = <u>YES</u> NO	YES
STAT.INIT = <u>WARM</u> COLD	WARM
STATISTICS.EXIT = modulename (modname[, <u>MANAGER</u>] [,SERVER] [,BOTH])	none
TCP = OES <u>NO</u>	NO
TCP.API.LISTEN = ((addr1 , port1) , (addrn , portn))	If the parameter is specified with an address only, the port can default to 1363.
TCP.LISTEN = ((addr1 , port1) , (addrn , portn))	If the parameter is specified with an address only, the port can default. The default port is 1364.
TCP.TIMER = wait time	0
TCQ = <u>WARM</u> COLD	WARM
TRACE.BUFFER = nnn <u>2</u>	2
UDT = YES <u>NO</u>	NO
UDT.MAXPROCESS = <u>2</u> number of executing UDT Processes	2
UDT33.LISTEN = ((ipaddr,port)[,(ipaddr,port)...])	The default port is 1366.
UPPER.CASE = YES <u>NO</u>	NO
V2.BUFSIZE = maximum buffer size for this transmission, TCP/IP send/receive buffer size)	4096, double the first parameter
ZIIP = <u>NONE</u> EXTCOMP SSLTLS ALL PROJECT	NONE
ZFBA = YES <u>NO</u>	NO

Chapter 6. Status Codes

Code	Description
EX	Process executing
HC	Held for call
HE	Held in error
HI	Held initially
HO	Held by operator
HP	Held due to Process error
HR	Submitted with RETAIN=YES or held for process retry (intelligent retry)
HS	Held for suspension
PR	Process being retained
RA	Held for restart due to allocation error
RH	Held for restart
RS	Restarting
SS	Session with other node is being started.
WA	Waiting acknowledgement
WC	Waiting connection
WR	Waiting restart
WS	Waiting designated start time
WT	Waiting transport protocol
WX	Waiting eligible Sterling Connect:Direct/Server

Chapter 7. Trace Types

DEBUG Setting†	Trace Type	DDNAME Where Output is Directed
80000000	COPY Routine and RUN TASK trace	RADBDD01
10000000	Full TPCB/SYMBOLICS from DMCBSUBM	DMCBSUBM
08000000	Session manager trace	RADBDD05
04000000	Separate trace per task (Example: "R0000005" to trace TASK 5)	Rnnnnnnn
02000000	API session trace	RADBDD07
01000000	DGADBSUB trace	RADBDD08
00400000	TCQSH from DGADCPYR	DMCOPYRT
00200000	Make each SVC dump unique	N/A
00100000	SECURITY Trace Control	SECURITY
00040000	GETMAIN/FREEMAIN trace	RADBDD16
00008000	I/O buffer trace	RADBDD21
00004000	WTO all dynamic allocation parameters	RADBDD22
00002000	Sterling Connect:Direct/Plex traces	
	ACTION queue manager trace	CDPLXACT
	CKPT queue manager trace	CDPLXCKP
	TCQ queue manager trace	CDPLXTCQ
	STATS queue manager trace	CDPLXSTA
	First REQUEST queue manager trace	CDPLXREQ
	Second and subsequent REQUEST queue manager trace (Example: "CDPLXR03" to trace third queue manager)	CDPLXRnn
	JOIN queue manager trace	CDPLXJOI
00001000	Workload balancing trace	CDPLXWLB
00000800	zIIP-related trace	CDZIIP
00000100	In-storage tracing only Note: The size of this in-storage table is controlled by TRACE.BUFFER	N/A
00000080	RPL trace – long	RPLOUT
00000040	RPL trace – short	RPLOUT
00000020	Version 2 session trace	RADBDD33
00000008	Logon exit trace	RADBDD35
00000004	Logon processor trace	RADBDD36
00000002	SCIP exit trace	RADBDD37
00000001	SNMP Trap trace	SCTRAPDD
00000400	ESTA* trace	CDESTAE

† The DEBUG=X'nnnnnnnn' initialization parameter turns on a specific trace option or any combination of options, where nnnnnnnn represents the debug setting in hexadecimal.

Note: The Modify command requests the same output as the DEBUG initialization parameter.

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