Defining Control Block Pools (POOLDEF Statement)

This chapter describes the POOLDEF statement which allows you to define pools of control blocks for Cisco IOS for S/390. It contains this section:

- Defining Control Block Pools

  Describes the usage of the POOLDEF statement

- Configuration Members

  Describes the configuration members where the POOLDEF statement can be used

- POOLDEF Statement Syntax

  Describes the syntax for the POOLDEF command

- Pool Types

  Describes the pools available for Cisco IOS for S/390

Defining Control Block Pools

The POOLDEF statement allows you to define pools of control blocks necessary to run the API and put limits on API usage. Because the API is used internally by the domain name resolver, it must be set up properly for Cisco IOS for S/390 to run. The pool definitions specify an initial amount, an expansion amount, and a minimum amount to limit contraction. You can adjust these numbers to minimize expansion and contraction and improve efficiency. Refer to Pool Types for more specific information.

It is recommended that you use the defaults at first, and issue the **POOL** command periodically to display pool usage. If you find pools are being expanded and staying at the higher value, override the default to specify a higher minimum value.

Configuration Members

The POOLDEF statement can be coded in several configuration members, depending on which pools you want to define. DNRCFGxx, IJTCFGxx, TCPCFGxx and SNMCFGxx all may contain the POOLDEF statement. Statement syntax remains the same, although the pool names must be specified according to the configuration. The tables listed in Pool Types specify the configuration members where the pool names are valid.

POOLDEF Statement Syntax

POOLDEF NAME (*name***)**

INITIAL (*value***)**

MINIMUM (*value***)**

EXPAND (*value***)**

CONTRACT (*value***)**

Syntax Description

NAME (*name*) Specifies the name of the pool to be defined.

One POOLDEF command must be entered for each of the pools listed in the table titled DNRCFGxx Control Block Pool.

Default: None. (parameter is required).

INITIAL (*value*) Specifies the initial number of pool elements to be obtained for the pool.

Default: None. (parameter is required).

MINIMUM (*value*) Specifies the minimum number of pool elements to be left in the pool if pool contraction is performed.

Default: None. (parameter is required).

EXPAND (*value*) Specifies the number of pool elements to be obtained when and if the pool must be expanded.

Default: None. (parameter is required).

CONTRACT (*value*) Specifies the number of pool elements to be freed when and if the pool must be contracted.

Default: None. (parameter is required).

Pool Types

These tables list the pool names with their initial, minimum, expand, and contract values. The tables are displayed according to the configuration member where they can be defined.

DNRCFGxx Control Block Pool

There is only one pool for DNRCFGxx. The DSRB pool has no default; values for the DSRB pool must be given explicitly.

Table 18-1 DNRCFGxx Control Block Pool

Pool	Description	Initial	Minimum	Expand	Contract
DSRB	Domain Name Resolution Request Block.				

IJTCFGxx Control Block Pools

This table lists the control block pools that can be defined in IJTCFGxx.

Caution You should consult with Technical Support before changing the values of these pools.

Table 18-2 IJTCFGxx Control Block Pools

Pool	Description	Initial	Minimum	Expand	Contract
MWA	Module Work Area.	100	200	50	75
SRB	IFS Service Request Block.	100	200	50	0
FRR	IFS Recovery Element.	100	200	50	0
XWA	Cross Memory Workarea.	112	160	24	0
QCB	Queue Control Element for pools.	100	200	50	0
STAK	Module Stack Block for workareas.	40	20	20	0
MSRB	Message Service Request Block.	200	400	100	0

TCPCFGxx Control Block Pools

Table 18-3 lists the control block pools that can be defined in TCPCFGxx.

Table 18-3 TCPCFGxx Control Block Pools

Pool	Description	Initial	Minimum	Expand	Contract
ATCB	Address space task block.	32	32	16	32
SEPM	Socket endpoint.	16	256	32	128
SPCB	Transport Provider (only 3 required total).	3	3	1	1
SAW	Socket API function.	64	512	32	256
IPTH	IUCV only, path to TCP.	64	64	32	64
MB1	Buffer pool for moving data - 128 bytes.	32	128	16	128
MB2	Buffer pool for moving data - 256 bytes.	32	256	16	256
MB3	Buffer pool for moving data - 512 bytes.	32	192	16	128
MB4	Buffer pool for moving data - 1024 bytes.	32	160	16	128
MB5	Buffer pool for moving data - 2048 bytes.	16	128	8	64
MB6	Buffer pool for moving data - 4096 bytes.	16	96	4	32
MB7	Buffer pool for moving data - 8192 bytes.	8	48	8	16
MB8	Buffer pool for moving data - 16384 bytes.	4	32	4	16
MB9	Buffer pool for moving data - 32768 bytes.	4	16	4	16
MBA	Buffer pool for moving data - 65536 bytes.	2	8	2	8

SNMCFGxx Control Block Pools

Table 18-4 lists the control block pools that you can define for SNMCFGxx. The SNMP and XAE pools have no defaults; values for them must be given explicitly.

Table 18-4 SNMCFGxx Control Block Pools

Pool	Description	Initial	Minimum	Expand	Contract
XAE	SNMP Request/Response header.				
SNMP	SNMP data.				