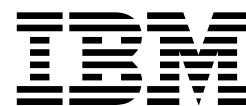
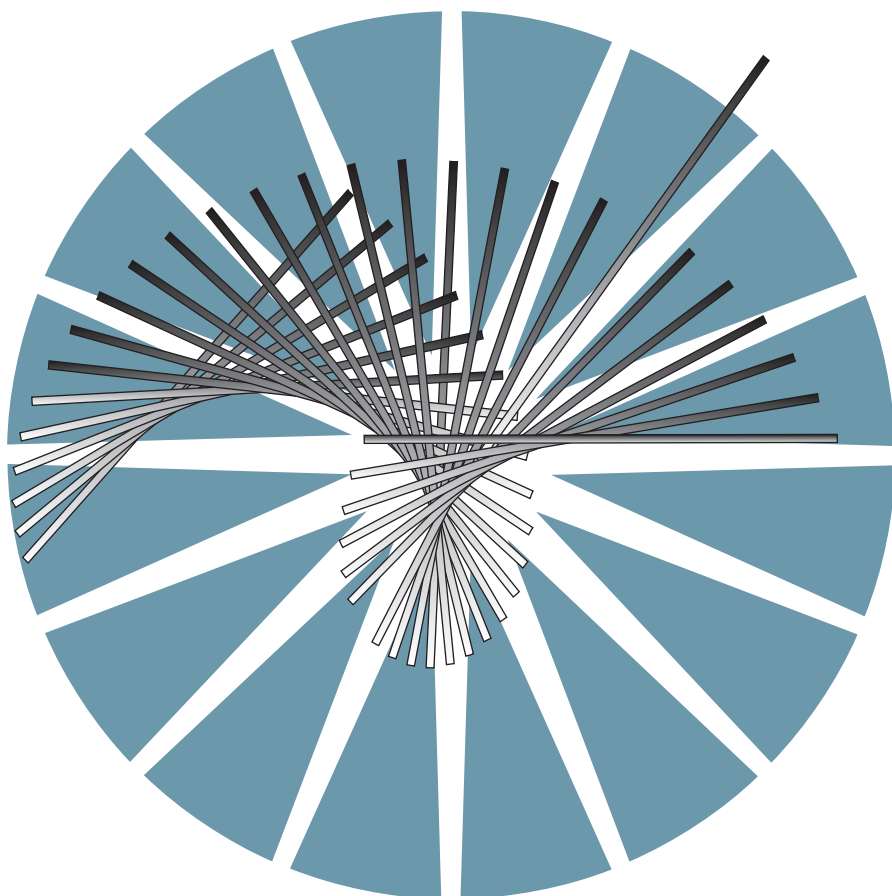


3745 Communication Controller Models A  
3746 Nways Multiprotocol Controller  
Models 900 and 950



# Planning Series:

## CCM Planning Worksheets





3745 Communication Controller Models A  
3746 Nways Multiprotocol Controller  
Models 900 and 950



Planning Series:

CCM Planning Worksheets

**Note!**

Before using this information and the product it supports, be sure to read the general information under “Notices” on page vii.

**First Edition (December 1997)**

This edition applies to the 3745 Communication Controller Models A and 3746 Nways Multiprotocol Controller Models 900 and 950.

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## Chapter 1. 3746 Worksheets

These worksheets are provided to help you with your planning before actually entering values into the Controller Configuration and Management (*CCM User's Guide*, SH11-3081) application. Correctly filled-out worksheets for each controller configuration can save you considerable time when you start using the *CCM User's Guide*, SH11-3081.

The online help for *CCM User's Guide*, SH11-3081 gives detailed explanations of the parameters and their values. It also gives parameter dependencies. The *CCM User's Guide*, SH11-3081 *User's Guide*, SH11-3081 helps you become familiar with navigating through *CCM User's Guide*, SH11-3081 and entering the *CCM User's Guide*, SH11-3081 parameters. The *IBM 3746 Nways Multiprotocol Controller Model 950 and 3746-900 Network Node: Implementation Guide*, GG24-2536 and *IBM 3746 Nways Multiprotocol Controller Model 950 and IBM Model 900: IP Implementation Guide*, SG24-4845 (IBM "redbooks") give sample configurations with examples of the related *CCM User's Guide*, SH11-3081 panels.

Over three quarters of the parameters have default values.

Fill in the configuration information for each port, link, station, and DLUR (if necessary) worksheet before beginning the *CCM User's Guide*, SH11-3081 configuration process.

As you proceed with a configuration in *CCM User's Guide*, SH11-3081, you will see that certain parameter fields are grayed out. Their values cannot be changed. This occurs because you have already made a choice that does not allow certain other parameters to be changed because either:

- *CCM User's Guide*, SH11-3081 automatically sets the value.
- The parameter has no meaning for the type of configuration you have chosen.

### Completing the Worksheets

To complete the worksheets, either check a box or write down a value.

**Note:** Refer to the *CCM User's Guide*, SH11-3081 online help for definitions of the parameters. You can find the start page for each group of worksheets as follows:

- **3745/3746**, starting on page 2
- **ESCON**, starting on page 3
- **Serial line**, starting on page 10
  - **SDLC**, starting on page 12
  - **Frame relay**, starting on page 20
  - **PPP**, starting on page 34
  - **X.25**, starting on page 38
- **Token ring**, starting on page 54
- **Network node and DLUR configuration parameters**, starting on page 63
- **IP**, starting on page 66
- **OSPF**, starting on page 70
- **RIP**, starting on page 75
- **BGP**, starting on page 76
- **ARP**, starting on page 79
- **SNMP**, starting on page 80.

---

## 3745/3746 Parameters

<i>Table 1. 3745/3746 Parameters</i>	
Parameter	Possible Values
3746 Model	<input type="checkbox"/> 900 <input type="checkbox"/> 950
3745 identifier	_____ (alphanumeric characters)
Mode of operations	<input type="checkbox"/> Single <input type="checkbox"/> Twin backup <input type="checkbox"/> Twin dual <input type="checkbox"/> Twin standby

---

## ESCON Configuration Sheets

To quickly locate a worksheet:

- ESCON Port Configuration, page 3
- ESCON Port – Host Link Configuration, page 4
- ESCON Host Link – APPN Parameters, page 5
- ESCON Port – Station Configuration, page 6
- ESCON Station – APPN Parameters, page 7
- ESCON Station – APPN/IP DLC Parameters, page 8
- ESCON Port – IP Access Controls, page 9.

## ESCON Port Configuration

<i>Table 2. ESCON Port Identification</i>	
<b>Port number:</b> _____	
Network:	<input type="checkbox"/> APPN <input type="checkbox"/> IP <input type="checkbox"/> SNA Subarea
Fiber Status	<input type="checkbox"/> Enable <input type="checkbox"/> Transmit OLS <input type="checkbox"/> Disable
Port name APPN	_____ alphanumeric characters
Port name IP	_____ alphanumeric characters
Automatic reactivation (APPN)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Automatic reactivation (IP)	<input type="checkbox"/> Yes <input type="checkbox"/> No
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
Port attached to an ESCD?	<input type="checkbox"/> Single <input type="checkbox"/> Chained <input type="checkbox"/> None
ESCD number	_____ hexadecimal (default: 0)
ESCD model	<input type="checkbox"/> 9032 <input type="checkbox"/> 9033
Control Unit Link Address (LINK)	_____ hexadecimal (80 - FB, default: 80)

## ESCON Port – Host Link Configuration

Table 3. ESCON Host Link Identification	
<b>Port number:</b> _____	
Network	<input type="checkbox"/> APPN (A) <input type="checkbox"/> IP (I) <input type="checkbox"/> SNA/Subarea (S)
Host Link Name (APPN)	_____ (alphanumeric characters)
Host Link Name (IP)	_____ (alphanumeric characters)
Host mode?	<input type="checkbox"/> Basic <input type="checkbox"/> LPAR <input type="checkbox"/> EMIF
Host name	_____ (alphanumeric characters)
Partition name	_____ (alphanumeric characters)
CHPID	_____ hexadecimal (0-FF, default: 0)
Partition number	<input type="checkbox"/> Dynamic <input type="checkbox"/> Defined If defined: _____ hexadecimal (1-A, default: 1)
Host Link Address (HLA)	<input type="checkbox"/> Dynamic <input type="checkbox"/> Defined If defined: _____ hexadecimal (80-FB, default: 80)

## ESCON Host Link – APPN Parameters

Table 4. ESCON Host Link – APPN Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Automatic reactivation	<input type="checkbox"/> Yes <input type="checkbox"/> No
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
Maximum received PIU size	_____ bytes (525-8000, default= 2058)
Maximum sent PIU size	_____ bytes (525-8000, default= 2058)
HPR support	<input type="checkbox"/> ERP required <input type="checkbox"/> No HPR support
Propagation delay	<input type="checkbox"/> Minimum <input type="checkbox"/> LAN <input type="checkbox"/> Telephone <input type="checkbox"/> Packet Switched Network <input type="checkbox"/> Satellite <input type="checkbox"/> Maximum
Security	<input type="checkbox"/> Non secure <input type="checkbox"/> Public Switched <input type="checkbox"/> Underground Cable <input type="checkbox"/> Secure Conduit <input type="checkbox"/> Guarded Conduit <input type="checkbox"/> Encrypted <input type="checkbox"/> Guarded Radiation
Relative cost per byte	_____ (0-255, default: 0)
Relative cost per unit of time	_____ (0-255, default: 0)

Table 5. APPN User Defined Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____	
User defined 1	_____ (0-255, default: 0)
User defined 2	_____ (0-255, default: 0)
User defined 3	_____ (0-255, default: 0)

## ESCON Port – Station Configuration

<i>Table 6. ESCON Station Identification</i>	
<b>Port number:</b> _____ <b>Port name :</b> _____ <b>Host link name:</b> _____	
Network	<input type="checkbox"/> APPN (A) <input type="checkbox"/> IP (I) <input type="checkbox"/> SNA/Subarea (S)
Access Method	<input type="checkbox"/> VTAM <input type="checkbox"/> TPF
Name	_____ (alphanumeric characters)
PU type	<input type="checkbox"/> 1 <input type="checkbox"/> 2.1 <input type="checkbox"/> 5
Unit address (UA)	_____ hexadecimal (default: 1)
IPL through that station	<input type="checkbox"/> Yes <input type="checkbox"/> No
On which CCU	<input type="checkbox"/> CCU-A <input type="checkbox"/> CCU-B
IP address	_____ (IP dotted notation)
IP subnet mask	_____ (IP dotted notation)
Comments	_____ _____



## ESCON Station – APPN Parameters

Table 7. ESCON Station – APPN Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Station name:</b> _____	
Activated at startup	<input type="checkbox"/> Yes <input type="checkbox"/> No
CP-CP session support	<input type="checkbox"/> Yes <input type="checkbox"/> No
Automatic re-activation	<input type="checkbox"/> Yes <input type="checkbox"/> No
Re-activation timer	_____ seconds (1-255, default: 30)
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
HPR support	<input type="checkbox"/> ERP required <input type="checkbox"/> No HPR support
<b>TG Characteristics</b>	
Propagation delay	<input type="checkbox"/> Minimum <input type="checkbox"/> LAN <input type="checkbox"/> Telephone <input type="checkbox"/> Packet Switched Network <input type="checkbox"/> Satellite <input type="checkbox"/> Maximum <input type="checkbox"/> Use port values as defaults
Security	<input type="checkbox"/> Non secure <input type="checkbox"/> Public Switched <input type="checkbox"/> Underground Cable <input type="checkbox"/> Secure Conduit <input type="checkbox"/> Guarded Conduit <input type="checkbox"/> Encrypted <input type="checkbox"/> Guarded Radiation <input type="checkbox"/> Use port values as defaults
Effective capacity	_____ bps (0-144000000, default: 144000000)
Relative cost per byte	_____ (0-255, default: 0)
Relative cost per unit of time	_____ (0-255, default: 0)
User defined 1	_____ (0-255, default: 0)
User defined 2	_____ (0-255, default: 0)
User defined 3	_____ (0-255, default: 0)

## ESCON Station – APPN/IP DLC Parameters

<i>Table 8. ESCON Station – APPN/IP DLC Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Station name:</b> _____ <b>Number:</b> _____	
Channel Adapter Slowdown Timer (CASDL)	_____ tenths of a second (0-8400, default: 1800)
Attention timer (TIMEOUT)	_____ tenths of a second (0-8400, default: 1800)
Delay timer (DELAY)	_____ tenths of a second (0-4200, default: 1)
Total transmit threshold	_____ (1-65025, default: 61440)
Total retry threshold	_____ (1-65025, default: 61440)

## ESCON Port – IP Access Controls

<i>Table 9. IP Access Controls</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Packet filter type (PFT)	<input type="checkbox"/> <i>Input (I)</i> <input type="checkbox"/> <i>Output (O)</i>
Access control type	<input type="checkbox"/> <i>Permit/Inclusive (I)</i> <input type="checkbox"/> <i>Deny/Exclusive (E)</i>
Source Network IP address	_____ (IP dotted notation)
Source Mask address	_____ (IP dotted notation)
Destination Network IP address	_____ (IP dotted notation)
Destination Mask address	_____ (IP dotted notation)
Protocol number: From	_____ numerical (0 – 255, default: 0)
Protocol number: To	_____ numerical (0 – 255, default: 255)
Port number: From	_____ numerical (0 – 65535, default: 0)
Port number: To	_____ numerical (0 – 65535, default: 65535)

---

## Serial Line Configuration Sheets

To quickly locate a configuration sheet:

- Serial Line Port Configuration, page 11
- SDLC Port – DLC Parameters, page 12
- SDLC Port – APPN Parameters, page 14
- SDLC Port – Station Configuration, page 15
- SDLC Station – APPN Parameters, page 16
- SDLC Station – DLC Parameters, page 19
- Adjacent Node – Remote LUs, page 18
- Frame-Relay Port – DLC Parameters, page 20
- Frame-Relay Port - LMI Parameters, page 21
- Frame-Relay Port - CIR Parameters, page 22
- Frame-Relay Port - APPN Parameters, page 23
- Frame-Relay DLCI/COMRATE Parameters, page 24
- Frame-Relay DLCI/CIR Parameters, page 25
- Frame-Relay DLCI/CIR - Bandwidth Reservation System (BRS) Parameters, page 26
- DLCI Remote IP Addresses, page 27
- APPN over Frame-Relay - Station Configuration, page 28
- Frame-Relay Station Configuration – APPN Parameters, page 29:
- Frame-Relay/FRTE Station/DLC parameters, page 31
- IP over Frame-Relay, page 32
- Frame-Relay Frame-Handler (FRFH) Set Configuration Parameters, page 33
- PPP Port – Parameters, page 34
- PPP Port - BRS Parameters, page 36
- PPP Port - BRS Protocol and Application Assignment, page 37
- X.25 Port – DLC Parameters, page 38
- X.25 Port – LAPB Parameters, page 39
- X.25 Port – PLP Parameters, page 40
- X.25 Port – APPN Parameters, page 42
- IP over X.25 – Port Parameters, page 43
- X.25 Station Configuration, page 44
- X.25 Station – DLC Parameters, page 45
- X.25 Station – APPN Parameters, page 46
- X.25 Station – Adjacent Node – Remote LUs, page 48
- IP over X.25 – Station Parameters, page 49
- X.25 Station – SVC Call Requests User Facilities and Data, page 50
- X.25 Station – SVC Call Requests User Facilities and Data (UFD), page 51
- X.25 Station – SVC Calling DTE Address, page 52
- Serial Port – IP Access Controls, page 53.

## Serial Line Port Configuration

<i>Table 10. Serial Line Port Configuration Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
DLC type	<input type="checkbox"/> Frame relay <input type="checkbox"/> PPP <input type="checkbox"/> <i>SDLC</i> <input type="checkbox"/> X.25
Network	<input type="checkbox"/> <i>APPN</i> <input type="checkbox"/> IP <input type="checkbox"/> FRFH
Port (number)	_____
APPN name	_____ (alphanumeric characters)
IP name	_____ (alphanumeric characters)
Comments	_____ _____

## SDLC Port – DLC Parameters

<i>Table 11 (Page 1 of 2). SDLC Port – DLC Parameters</i>	
<b>Default values are different for LIC11 and LIC12.</b> <b>They are not shown in Table 11.</b> <b>Refer to the online help for further information.</b>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Port type	<input type="checkbox"/> Leased <input type="checkbox"/> Switched
Interface	<input type="checkbox"/> V.24 <input type="checkbox"/> V.25B <input type="checkbox"/> V.35 <input type="checkbox"/> X.21
Clocking	<input type="checkbox"/> Internal <input type="checkbox"/> Direct <input type="checkbox"/> External
Data rate	<input type="checkbox"/> High <input type="checkbox"/> Low
Speed	_____ Kbps (0.6, 1.2, 2.4, 4.8, 9.6, 19.2, 32, 38.4, 55.855, 64, 256)
Link station role	<input type="checkbox"/> Negotiable <input type="checkbox"/> Primary <input type="checkbox"/> Secondary
Transmit/Receive Capability	<input type="checkbox"/> Half Duplex <input type="checkbox"/> Full Duplex
Limited resource	<input type="checkbox"/> Yes <input type="checkbox"/> No
Transmit request to send on (DUPLEX)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Transmit NRZI	<input type="checkbox"/> Yes <input type="checkbox"/> No
Echo defeat	<input type="checkbox"/> Yes <input type="checkbox"/> No
Half duplex send priority (HDXSP)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Link session priority (LSPRI)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Multipoint capable (MULTI)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Monitor ring indicator (RING)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Generate answer tone (ANSTONE)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Interframe gap (ADDIFG)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Enable timer (ENABLTO)	_____ tenths of seconds (1-16320)

<i>Table 11 (Page 2 of 2). SDLC Port – DLC Parameters</i>	
<b>Default values are different for LIC11 and LIC12.</b> <b>They are not shown in Table 11 on page 12.</b> <b>Refer to the online help for further information.</b>	
Disable timer (DSABLTO)	_____ tenths of seconds (1-16320)
Reply timer (REPLYTO)	_____ tenths of seconds (1-600)
Activity timer (ACTIVTO)	_____ tenths of seconds (1-4200)
Dial timer (DIALTO)	_____ tenths of seconds (1-16320)
Transmit delay timer (XMITDLY)	_____ tenths of seconds (1-600)
Retry timer (RETRYTO)	_____ tenths of seconds (1-16320)
Poll pause (PAUSE)	_____ tenths of seconds (0-255)
CPoll rate (SERVLIM)	_____ numerical (1-255)
Dial attempt (REDIAL-m)	_____ numerical (0-255)
Dial pause per attempt (REDIAL-t1)	_____ seconds (0-765)
Dial sequence (REDIAL-n)	_____ numerical (0-255)
Dial pause per sequence (REDIAL-t2)	_____ seconds (0-765)

## SDLC Port – APPN Parameters

Table 12. SDLC Port - APPN Parameters	
<b>Port number:</b> _____ <b>Port name :</b> _____ <b>Host link name:</b> _____	
Accept any incoming call	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes Maximum number of incoming calls: _____
Automatic reactivation	<input type="checkbox"/> Yes <input type="checkbox"/> No
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
Maximum receive PIU size	_____ bytes (99-8000, default= 2058)
Maximum sent PIU size	_____ bytes (99-8000, default= 2058)
HPR support	<input type="checkbox"/> ERP required <input type="checkbox"/> No HPR support
Propagation delay	<input type="checkbox"/> Minimum <input type="checkbox"/> LAN <input type="checkbox"/> Telephone <input type="checkbox"/> Packet Switched Network <input type="checkbox"/> Satellite <input type="checkbox"/> Maximum
Security	<input type="checkbox"/> Non-secure <input type="checkbox"/> Public Switched <input type="checkbox"/> Underground Cable <input type="checkbox"/> Secure Conduit <input type="checkbox"/> Guarded Conduit <input type="checkbox"/> Encrypted <input type="checkbox"/> Guarded Radiation
Relative cost per byte	_____ (0-255, default:0)
Relative cost per unit of time	_____ (0-255, default:0)
User defined 1	_____ (0-255, default: 0)
User defined 2	_____ (0-255, default: 0)
User defined 3	_____ (0-255, default: 0)



## SDLC Port – Station Configuration

<i>Table 13. SDLC Station Configuration</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Name	_____ (alphanumeric characters)
PU type	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 2.1
Destination Address	_____ hexadecimal (01 - FE, default: 1)
Call request	<input type="checkbox"/> <i>CRN</i> <input type="checkbox"/> <i>CRI</i> <input type="checkbox"/> <i>CRS</i> <input type="checkbox"/> None
Dial number	_____
Comments	_____ _____

## SDLC Station – APPN Parameters

Table 14 (Page 1 of 2). SDLC Station – APPN Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Host link name (APPN):</b> _____ <b>Host link name (IP):</b> _____	
Activated at startup	<input type="checkbox"/> Yes <input type="checkbox"/> No
CP-CP session support	<input type="checkbox"/> Yes <input type="checkbox"/> No
Automatic re-activation	<input type="checkbox"/> Yes <input type="checkbox"/> No
Re-activation timer	_____ seconds (1-255, default:30)
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
HPR support	<input type="checkbox"/> ERP required <input type="checkbox"/> No HPR support
<b>TG characteristics</b>	
Propagation delay	<input type="checkbox"/> Minimum <input type="checkbox"/> LAN <input type="checkbox"/> Telephone <input type="checkbox"/> Packet Switched Network <input type="checkbox"/> Satellite <input type="checkbox"/> Maximum
Security	<input type="checkbox"/> Non-secure <input type="checkbox"/> Public Switched <input type="checkbox"/> Underground Cable <input type="checkbox"/> Secure Conduit <input type="checkbox"/> Guarded Conduit <input type="checkbox"/> Encrypted <input type="checkbox"/> Guarded Radiation
Effective capacity (LIC11)	_____ bps (0-9600, default:9600)
Effective capacity (LIC12)	_____ bps (0-2047800, default:2047800)
Relative cost per byte	_____ (0-255, default:128)
Relative cost per unit of time	_____ (0-255, default:128)
User defined 1	_____ (0-255, default: 0)
User defined 2	_____ (0-255, default: 0)
User defined 3	_____ (0-255, default: 0)
<b>Multilink Transmission Group (MLTG) and Activate on Demand (AOD) Parameters</b>	

<i>Table 14 (Page 2 of 2). SDLC Station – APPN Parameters</i>	
	<input type="checkbox"/> MLTG <input type="checkbox"/> AOD
MLTG name	_____
TG number	_____ (default=1)
<b>AOD Parameters:</b>	
Adjacent node Network ID	_____
Adjacent node Control point name	_____
Adjacent node type	<input type="checkbox"/> NN <input type="checkbox"/> EN <input type="checkbox"/> LEN
<b>Dependent LU Requester (DLUR) Parameters</b>	
Adjacent node identifier	_____ (hexadecimal)
XID receipt supported	<input type="checkbox"/> Yes <input type="checkbox"/> No
Primary Dependent LU Server (DLUS):	
Primary DLUS Network identifier	_____
Primary DLUS Server name	_____
Backup DLUS	<input type="checkbox"/> Yes <input type="checkbox"/> No
Backup DLUS:	
Network identifier	_____
Server name	_____

## Adjacent Node – Remote LUs

<i>Table 15. Adjacent Node – Remote LUs</i>	
<b>Remote LU</b>	
Network Identifier	_____
Remote LU name	_____
Wildcard Entry (WE)	<input type="checkbox"/> Full (F) <input type="checkbox"/> Partial (P) <input type="checkbox"/> No (N)
<b>Adjacent Node</b>	
Network Identifier	_____
Control point name	_____
Comments	_____ _____

## SDLC Station – DLC Parameters

Table 16. SDLC Station – DLC Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Station name:</b> _____	
Full Duplex Data (DATMODE)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Limited Resource	<input type="checkbox"/> Yes <input type="checkbox"/> No
Modulo	<input type="checkbox"/> 8 <input type="checkbox"/> 128
Group poll (GP3174)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Group poll address (group address)	_____ hexadecimal (01-FE)
Polling weight	_____ (1–255, default: 1)
Maximum transmitted frames before acknowledgment received (MAXOUT)	_____ (1–7, default: 1)
Maximum number of frames (PASSLIM)	_____ (1–254, default: 254)
RNR limit (RNRLIMIT)	_____ seconds (60–5400, default: 180)
Total transmit threshold	_____ seconds (1–65025, default: 61440)
Total retry threshold	_____ seconds (1–65025, default: 61440)
Immediate retry (IRETRY)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Infinite retries	<input type="checkbox"/> Yes <input type="checkbox"/> No
Retries per retry sequence (RETRIES-m)	_____ seconds (0–128, default: 15)
Retry sequences (RETRIES-n)	_____ seconds (0–127, default: 0)
Pause between retry sequences (RETRIES-t)	_____ seconds (0–255, default: 0)

## Frame-Relay Port – DLC Parameters

Table 17. Frame-Relay Port – DLC Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Port type	<input type="checkbox"/> <i>Leased</i> <input type="checkbox"/> <i>Switched</i>
Interface	<input type="checkbox"/> <i>V.24</i> <input type="checkbox"/> <i>V.25B</i> <input type="checkbox"/> <i>V.35</i> <input type="checkbox"/> <i>X.21</i>
Clocking	<input type="checkbox"/> <i>Internal</i> <input type="checkbox"/> <i>Direct</i> <input type="checkbox"/> <i>External</i>
Data rate	<input type="checkbox"/> <i>High</i> <input type="checkbox"/> <i>Low</i>
Speed	_____ Kbps (0.6, 1.2, 2.4, 4.8, 9.6, 19.2, 32, 38.4, 55.855, 64, 256, default=9.6)
Transmit NRZI	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Interframe gap (ADDIFG)	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Limited resources	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Bandwidth Management	<input type="checkbox"/> <i>COMRATE</i> <input type="checkbox"/> <i>CIR</i>
Maximum frame size (MAXFRAME)	_____ bytes (282 – 8050, default: 2106)
Data block size (DATABLK)	_____ bytes (265 – 16732, default: 2048)
Enable timer (ENABLTO)	_____ tenths of seconds (1 – 16320, default: 22)
Disable timer (DSABLTO)	_____ tenths of seconds (1 – 16320, default: 30)
Boundary node identifier	_____ hexadecimal (1 – 7FFFFFFFFFFFF, default: 4FFF00000000)
Local SAP (LSAP)	_____ hexadecimal (04 – 9C, default: 8)

## Frame-Relay Port - LMI Parameters

Table 18. Frame-Relay Port – LMI Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Category	<input type="checkbox"/> ANSI <input type="checkbox"/> ITU-T <input type="checkbox"/> No
Echo	<input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Neither
LMI NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
Remote LMI support	<input type="checkbox"/> Negotiable <input type="checkbox"/> Network to user
Maximum number of DLCIs	_____ numerical (1 – 418, default: 48)
Link integrity verification polling timer (TIMERS - t391)	_____ seconds (5 – 30, default: 10)
Polling verification timer (t392)	_____ seconds (5 – 30, default: 15)
Status polling counter (SPOLL)	_____ numerical (1 – 255, default: 6)
Error Threshold (ERRORT - n392)	_____ numerical (1 – 10, default: 3)
Monitored event counts (n393)	_____ numerical (1 – 10, default: 4)

## Frame-Relay Port - CIR Parameters

<i>Table 19. Frame-Relay Port – CIR Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Minimum information rate	_____% of CIR (default: 25%)
Adaptation precision	_____numerical (6 – 10, default: 7)
CLLM support	<input type="checkbox"/> Yes <input type="checkbox"/> No
Recovery interval timer (ty)	_____seconds (5 – 30, default: 11)



## Frame-Relay Port - APPN Parameters

Table 20. Frame-Relay Port – APPN Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Accept any incoming call	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes Maximum number of incoming calls: _____ (0-3000, default: 3000)
Automatic reactivation	<input type="checkbox"/> Yes <input type="checkbox"/> No
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
Maximum receive PIU size	_____ bytes (99-8000, default= 2106)
Maximum sent PIU size	_____ bytes (99-8000, default= 2106)
HPR support	<input type="checkbox"/> No ERP preferred <input type="checkbox"/> No HPR support <input type="checkbox"/> ERP required <input type="checkbox"/> ERP not allowed
Propagation delay	<input type="checkbox"/> Minimum <input type="checkbox"/> LAN <input type="checkbox"/> Telephone <input type="checkbox"/> Packet Switched Network <input type="checkbox"/> Satellite <input type="checkbox"/> Maximum
Security	<input type="checkbox"/> Non-secure <input type="checkbox"/> Public Switched <input type="checkbox"/> Underground Cable <input type="checkbox"/> Secure Conduit <input type="checkbox"/> Guarded Conduit <input type="checkbox"/> Encrypted <input type="checkbox"/> Guarded Radiation
Relative cost per byte	_____ (0-255, default: 0)
Relative cost per unit of time	_____ (0-255, default: 0)
User defined 1	_____ (0-255, default: 0)
User defined 2	_____ (0-255, default: 0)
User defined 3	_____ (0-255, default: 0)

## Frame-Relay DLCI/COMRATE Parameters

<i>Table 21. Frame-Relay DLCI/COMRATE Parameters</i>	
Port number: _____	
Port name: _____	
<b>Configure a DLCI</b>	
Network	<input type="checkbox"/> APPN <input type="checkbox"/> IP <input type="checkbox"/> FRFH
DLCI number	_____numerical (16-991)
DLCI IP name	_____numerical
Remote IP address	_____numerical
Communication rate (COMRATE)	Per APPN station <input type="checkbox"/> Default value _____bits (16384-1048576) IP <input type="checkbox"/> Default value _____bits (16384-1048576)

## Frame-Relay DLCI/CIR Parameters

<i>Table 22. Frame-Relay DLCI/CIR Parameters</i>	
Port number: _____	
Port name: _____	
<b>Configure a DLCI</b>	
Network	<input type="checkbox"/> APPN <input type="checkbox"/> IP <input type="checkbox"/> FRFH
DLCI number	_____numerical (16-991)
DLCI IP name	_____numerical
Remote IP address	_____numerical
Use default DLCI values	<input type="checkbox"/>
Measurement interval (Tc)	_____tenths seconds (1-255)
Committed burst size (Bc)	_____bits (0-1048576)
Excess burst size (Be)	_____bits (0-1048576)
Excess burst size (Be)	_____bits (0-1048576)
APPN BRS	<input type="checkbox"/> Yes <input type="checkbox"/> No
IP BRS	<input type="checkbox"/> Yes <input type="checkbox"/> No

## Frame-Relay DLCI/CIR - Bandwidth Reservation System (BRS) Parameters

<i>Table 23. Frame-Relay DLCI/CIR – BRS Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>DLCI number:</b> _____	
<b>Configure a DLCI</b>	
APPN/HPR ERP	_____ %
HPR non ERP	_____ %
IP	_____ %
IP sockets (Port number) Socket: _____ (1-20000) BRS: _____	

## DLCI Remote IP Addresses

<i>Table 24. DLCI Remote IP Addresses</i>
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>DLCI IP name:</b> _____ <b>DLCI number:</b> _____
Remote IP addresses

## APPN over Frame-Relay - Station Configuration

<i>Table 25. APPN over Frame-Relay – Station Configuration</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>DLCI number:</b> _____	
Name	_____ (alphanumeric)
Type	<input type="checkbox"/> FRTE PU 1 or 2 <input type="checkbox"/> <i>FRTE PU 2.1</i>
Frame format (FF)	<input type="checkbox"/> <i>Routed</i> <input type="checkbox"/> Bridged
Remote MAC address (LAA)	_____ hexadecimal
Remote SAP (RSAP)	_____ hexadecimal (02 – FE, default: 4
Comments	_____ _____

## Frame-Relay Station Configuration – APPN Parameters

Table 26 (Page 1 of 2). Frame-Relay Station – APPN Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Host link name (APPN):</b> _____ <b>Host link name (IP):</b> _____	
Activated at startup	<input type="checkbox"/> Yes <input type="checkbox"/> No
CP-CP session support	<input type="checkbox"/> Yes <input type="checkbox"/> No
Automatic re-activation	<input type="checkbox"/> Yes <input type="checkbox"/> No
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
HPR support	<input type="checkbox"/> No ERP preferred <input type="checkbox"/> ERP not allowed <input type="checkbox"/> ERP required <input type="checkbox"/> No HPR support
<b>TG characteristics</b>	
Propagation delay	<input type="checkbox"/> Minimum <input type="checkbox"/> LAN <input type="checkbox"/> Telephone <input type="checkbox"/> Packet Switched Network <input type="checkbox"/> Satellite <input type="checkbox"/> Maximum
Security	<input type="checkbox"/> Non secure <input type="checkbox"/> Public Switched <input type="checkbox"/> Underground Cable <input type="checkbox"/> Secure Conduit <input type="checkbox"/> Guarded Conduit <input type="checkbox"/> Encrypted <input type="checkbox"/> Guarded Radiation
Effective capacity (LIC11)	_____ kbps (0-9.6, default: 9.6)
Effective capacity (LIC12)	_____ kbps (0-2047.8, default: 2047.8)
Relative cost per byte	_____ (0-255, default: 0)
Relative cost per unit of time	_____ (0-255, default: 0)
User defined 1	_____ (0-255, default: 0)
User defined 2	_____ (0-255, default: 0)
User defined 3	_____ (0-255, default: 0)
<b>Multilink Transmission Group (MLTG) and Activate on Demand (AOD) Parameters</b>	
<input type="checkbox"/> MLTG <input type="checkbox"/> AOD	

<i>Table 26 (Page 2 of 2). Frame-Relay Station – APPN Parameters</i>	
MLTG name	_____
TG number	_____ (default=1)
AOD Parameters:	
Adjacent node Network ID	_____
Adjacent node Control point name	_____
Adjacent node type	<input type="checkbox"/> NN <input type="checkbox"/> EN <input type="checkbox"/> LEN
<b>Dependent LU Requester (DLUR) Parameters</b>	
Adjacent node identifier	_____ (hexadecimal)
XID receipt supported	<input type="checkbox"/> Yes <input type="checkbox"/> No
Primary Dependent LU Server (DLUS):	
Primary DLUS Network identifier	_____
Primary DLUS Server name	_____
Backup DLUS	<input type="checkbox"/> Yes <input type="checkbox"/> No
Backup DLUS:	
Network identifier	_____
Server name	_____



## Frame-Relay/FRTE Station/DLC parameters

Table 27. Frame-Relay/FRTE Station	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Host link name (APPN):</b> _____ <b>Host link name (IP):</b> _____	
Window increment (DYNWIND - nw)	_____ numerical (1 – 8, default: 4)
Window decrement for congestion (DYNWIND - dwc)	_____ numerical (1 – 16, default: 1)
Discard eligibility	<input type="checkbox"/> None/Yes <input type="checkbox"/> Full/No
T1 reply timer (LOCALT0):	_____ tenths of a second (6–200,default: 100)
T2 acknowledgment timer (LOCALT2):	_____ tenths of a second (0–20,default: 2)
Inactivity timer (TITIMER):	_____ seconds (60–254,default: 60)
Maximum transmitted frames before acknowledgment received (MAXOUT):	_____ numerical (1–127,default: 8)
Maximum received frames before acknowledgment transmitted (MAXIN):	_____ numerical (1–127,default: 6)
RNR limit (RNRLIMIT):	_____ seconds (60–5400,default: 180)
Authorize infinite retries?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Retries per retry sequence (RETRIES-m):	_____ numerical (1–128,default: 6)
Retry sequences (RETRIES-n):	_____ numerical (0–127,default: 0)
Pause between retry sequences (RETRIES-t):	_____ seconds (0–255,default: 0)

## IP over Frame-Relay

<i>Table 28. IP over Frame-Relay</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Automatic reactivation	<input type="checkbox"/> Yes <input type="checkbox"/> No
General	<input type="checkbox"/> Enable orphan circuits <input type="checkbox"/> Enable multicast emulation <input type="checkbox"/> Enable protocol broadcast <input type="checkbox"/> Enable congestion monitor
Down time	_____seconds (0 – 300, default: 0)
IP address:	_____ (IP dotted notation)
Enable next hop awareness (NHA)	<input type="checkbox"/>
Subnet mask:	_____ (IP dotted notation)

## Frame-Relay Frame-Handler (FRFH) Set Configuration Parameters

<i>Table 29. Frame-Relay Frame&amp;dashHandler Set Configuration Parameters</i>	
FRFH set name	_____
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
Port DLCI name	
Primary partners	A _____ B _____
Substitute partners	C _____ D _____

## PPP Port – Parameters

Table 30 (Page 1 of 2). PPP Port – Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Port type	<input type="checkbox"/> <i>Leased</i> <input type="checkbox"/> <i>Switched</i>
Interface	<input type="checkbox"/> <i>V.24</i> <input type="checkbox"/> <i>V.25B</i> <input type="checkbox"/> <i>V.35</i> <input type="checkbox"/> <i>X.21</i>
Clocking	<input type="checkbox"/> <i>Internal</i> <input type="checkbox"/> <i>Direct</i> <input type="checkbox"/> <i>External</i>
Data rate	<input type="checkbox"/> <i>High</i> <input type="checkbox"/> <i>Low</i>
Speed	_____ Kbps (0.6, 1.2, 2.4, 4.8, 9.6, 19.2, 32, 38.4, 55.855, 64, 256, default=9.6)
Transmit NRZI	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Interframe gap (ADDIFG)	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Automatic re-activation	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Maximum transmission unit	_____ bytes (576 – 4088, default: 2048)
Port IP Address:	
<input type="checkbox"/> Unnumbered IP address	_____
IP address	(IP dotted notation)
Subnet mask	_____
	(IP dotted notation)
<b>LCP parameters</b>	
Retry timer	_____ milliseconds (200 – 30000, default: 3000)
Config tries	_____ numerical (1 – 100, default: 20)
NAK tries	_____ numerical (1 – 100, default: 10)
Terminate tries	_____ numerical (1 – 100, default: 10)
Down time	_____ seconds (0 – 300, default: 0)
Enable timer (ENABLETO)	_____ ts (1 – 16320, default: 22)
Magic number	<input type="checkbox"/>
Number of slots	_____ num (1 – 16, default: 16)
IP compression	<input type="checkbox"/>

<i>Table 30 (Page 2 of 2). PPP Port – Parameters</i>	
Send IP address	<input type="checkbox"/>
Request IP address	<input type="checkbox"/>

## PPP Port - BRS Parameters

<i>Table 31. PPP Port – BRS Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Enable Bandwidth Reservation for this port	<input type="checkbox"/>
<b>Configure a Bandwidth Reservation Class (BRC)</b>	
Class name	_____
Bandwidth percentage	_____numerical (1 – 99, default: 40)

## PPP Port - BRS Protocol and Application Assignment

Table 32. PPP Port – BRS Protocol – Application Assignment		
Protocol or Application	Class Name or Bandwidth	Priority
IP	_____ (default: <i>DEFAULT</i> )	<input type="checkbox"/> <i>Normal</i> <input type="checkbox"/> Urgent <input type="checkbox"/> High <input type="checkbox"/> Low
Rlogin	_____ (default: <i>DEFAULT</i> )	<input type="checkbox"/> <i>Normal</i> <input type="checkbox"/> Urgent <input type="checkbox"/> High <input type="checkbox"/> Low
Telnet	_____ (default: <i>DEFAULT</i> )	<input type="checkbox"/> <i>Normal</i> <input type="checkbox"/> Urgent <input type="checkbox"/> High <input type="checkbox"/> Low
SNMP	_____ (default: <i>DEFAULT</i> )	<input type="checkbox"/> <i>Normal</i> <input type="checkbox"/> Urgent <input type="checkbox"/> High <input type="checkbox"/> Low
Multicast	_____ (default: <i>DEFAULT</i> )	<input type="checkbox"/> <i>Normal</i> <input type="checkbox"/> Urgent <input type="checkbox"/> High <input type="checkbox"/> Low

## X.25 Port – DLC Parameters

Table 33. X.25 Port – DLC Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Port type	<input type="checkbox"/> <i>Leased</i> <input type="checkbox"/> <i>Switched</i>
Interface	<input type="checkbox"/> V.24 <input type="checkbox"/> V.25B <input type="checkbox"/> V.35 <input type="checkbox"/> X.21
Clocking	<input type="checkbox"/> <i>Internal</i> <input type="checkbox"/> <i>Direct</i> <input type="checkbox"/> <i>External</i>
Data rate	<input type="checkbox"/> <i>High</i> <input type="checkbox"/> <i>Low</i>
Speed	_____ Kbps (0.6, 1.2, 2.4, 4.8, 9.6, 19.2, 32, 38.4, 55.855, 64, 256)
Limited resource	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Transmit NRZI	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Interframe gap (ADDIFG)	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Enable timer (ENABLTO)	_____ tenths of seconds (1-16320, default: 22)
Disable timer (DSABLTO)	_____ tenths of seconds (1-16320, default: 30)



## X.25 Port – LAPB Parameters

<i>Table 34. X.25 Port – LAPB Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
DTE to DTE	<input type="checkbox"/> Yes <input type="checkbox"/> No
ILAPB role	<input type="checkbox"/> DTE <input type="checkbox"/> DCE
Modulo	<input type="checkbox"/> 128 <input type="checkbox"/> 8
K (MWINDOW) Frame window size	_____numerical (1-7, default: 7)
N1 (FRMLGTH) Maximum frame size	_____bytes (35-4100, default: 131)
T1 (TPTIMER) Reply timer	_____tenths of seconds (5-255, default: 50)
T2 Acknowledgement timer	_____tenths of seconds (0-255, default: 5)
T4 Inactivity timer	_____seconds (1-65535, default: 60)
N2 (NPRETRY) Maximum transmission attempts	_____numerical (1-255, default: 7)

## X.25 Port – PLP Parameters

<i>Table 35 (Page 1 of 2). X.25 Port – PLP Parameters</i>	
Port number: _____	
Port name: _____	
X.25 local DTE address _____	
PLP role	<input type="checkbox"/> DTE <input type="checkbox"/> DCE <input type="checkbox"/> Negotiable
X.25 version	<input type="checkbox"/> ITU-T 93 <input type="checkbox"/> CCITT 80 <input type="checkbox"/> CCITT 84 <input type="checkbox"/> CCITT 88
Accounting required	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes: Segment tax unit: <input type="checkbox"/> Packet unit <input type="checkbox"/> 32 <input type="checkbox"/> 64 <input type="checkbox"/> 128
<b>Logical Channel Numbers (LCN) (1-4095)</b>	
Permanent Virtual Circuits (PVCs)	
Lowest	_____
Highest	_____
DTE incoming channels (SVCs)	
Lowest	_____
Highest	_____
Two-way channels (SVCs)	
Lowest	_____
Highest	_____
DTE outgoing channels (SVCs)	
Lowest	_____
Highest	_____
PLP modulo	<input type="checkbox"/> 8 <input type="checkbox"/> 128
<b>SVC defaults</b>	
Packet window calling to called	_____numerical (1-7, default: 2)
Packet window called to calling	_____numerical (1-7, default: 2)
Packet size calling to called	_____bytes (default: 128)
Packet size called to calling	_____bytes (default: 128)
<b>PLP Port Timers (seconds (1-255))</b>	
Restart timer (T20)	_____bytes (default: 180)
Call timer (T21)	_____bytes (default: 200)
Reset timer (T22)	_____bytes (default: 180)

<i>Table 35 (Page 2 of 2). X.25 Port – PLP Parameters</i>	
Clear timer (T23)	_____bytes (default: 180)
<b>PLP Port Maximum Retries (numerical (0-255))</b>	
Restart retry (R20)	_____bytes (default: 1)
Reset retry (R22)	_____bytes (default: 1)
Clear retry (R23)	_____bytes (default: 1)

## X.25 Port – APPN Parameters

Table 36. X.25 Port – APPN Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Accept any incoming call	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes Maximum number of incoming calls: _____
Automatic reactivation	<input type="checkbox"/> Yes <input type="checkbox"/> No
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
Maximum receive PIU size	_____ bytes (99-8000, default= 2058)
Maximum sent PIU size	_____ bytes (99-8000, default= 2058)
HPR support	<input type="checkbox"/> ERP required <input type="checkbox"/> No HPR support
Propagation delay	<input type="checkbox"/> Minimum <input type="checkbox"/> LAN <input type="checkbox"/> Telephone <input type="checkbox"/> Packet Switched Network <input type="checkbox"/> Satellite <input type="checkbox"/> Maximum
Security	<input type="checkbox"/> Non-secure <input type="checkbox"/> Public Switched <input type="checkbox"/> Underground Cable <input type="checkbox"/> Secure Conduit <input type="checkbox"/> Guarded Conduit <input type="checkbox"/> Encrypted <input type="checkbox"/> Guarded Radiation
Relative cost per byte	_____ (0-255, default:64)
Relative cost per unit of time	_____ (0-255, default:0)
User defined 1	_____ (0-255, default: 0)
User defined 2	_____ (0-255, default: 0)
User defined 3	_____ (0-255, default: 0)

## IP over X.25 – Port Parameters

<i>Table 37. IP over X25 – Port Parameters</i>	
<b>Port number:</b> _____	
<b>Port name:</b> _____	
Automatic reactivation	<input type="checkbox"/> Yes <input type="checkbox"/> No
Maximum transmission unit	_____ bytes (576-4096, default: 2048)
No idle timer	<input type="checkbox"/>
Idle timer	_____ seconds (1-255, default: 30)
IP address	_____
Subnet mask	_____

## X.25 Station Configuration

<i>Table 38. X.25 Station Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Network	<input type="checkbox"/> <i>APPN</i> <input type="checkbox"/> <i>IP</i>
Station name	_____
PVC	<input type="checkbox"/>
SVC	<input type="checkbox"/>
TOA/NPI	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
TOA	<input type="checkbox"/> <i>Network dependent (0)</i> <input type="checkbox"/> <i>International (1)</i> <input type="checkbox"/> <i>National (2)</i>
NPI	<input type="checkbox"/> <i>X.121 (3)</i> <input type="checkbox"/> <i>E164 (1)</i>
Remote DTE address	_____
LCN	_____
PU type	<input type="checkbox"/> <i>2</i> <input type="checkbox"/> <i>2.1</i>
Comments	_____ _____

## X.25 Station – DLC Parameters

<i>Table 39. X.25 Station DLC Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Network:</b> _____ <b>Station name:</b> _____ <b>X.25 remote DTE address:</b> _____ <b>PVC logical channel number:</b> _____	
PVC packet window size in	_____numerical (1-7, default: 2)
PVC packet window size out	_____numerical (1-7, default: 2)
PVC packet size in	_____bytes (32-4096, default: 128)
PVC packet size out	_____bytes (32-4096, default: 128)
QLLC retry count	_____seconds (0-255, default: 3)
QLLC retry timer	_____seconds (1-255, default: 30)
Limited resources	<input type="checkbox"/> Yes <input type="checkbox"/> No
Use port values as default	<input type="checkbox"/>

## X.25 Station – APPN Parameters

<i>Table 40 (Page 1 of 2). X.25 Station – APPN Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Station name:</b> _____	
Activated at startup	<input type="checkbox"/> Yes <input type="checkbox"/> No
CP-CP session support	<input type="checkbox"/> Yes <input type="checkbox"/> No
Automatic re-activation	<input type="checkbox"/> Yes <input type="checkbox"/> No
Re-activation timer	_____ seconds (1-255, default:30)
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
HPR support	<input type="checkbox"/> <i>ERP required</i> <input type="checkbox"/> No HPR support
<b>TG characteristics</b>	
Propagation delay	<input type="checkbox"/> Minimum <input type="checkbox"/> LAN <input type="checkbox"/> Telephone <input type="checkbox"/> <i>Packet Switched Network</i> <input type="checkbox"/> Satellite <input type="checkbox"/> Maximum
Security	<input type="checkbox"/> Non-secure <input type="checkbox"/> <i>public Switched</i> <input type="checkbox"/> Underground Cable <input type="checkbox"/> Secure Conduit <input type="checkbox"/> Guarded Conduit <input type="checkbox"/> Encrypted <input type="checkbox"/> Guarded Radiation
Effective capacity (LIC11)	_____ bps (0-9600, default:9600)
Relative cost per byte	_____ (0-255, default:64)
Relative cost per unit of time	_____ (0-255, default:0)
User defined 1	_____ (0-255, default: 0)
User defined 2	_____ (0-255, default: 0)
User defined 3	_____ (0-255, default: 0)
<b>Multilink Transmission Group (MLTG) and Activate on Demand (AOD) Parameters</b>	
	<input type="checkbox"/> MLTG <input type="checkbox"/> AOD
MLTG name	_____



<i>Table 40 (Page 2 of 2). X.25 Station – APPN Parameters</i>	
TG number	_____ (default=1)
<b>AOD Parameters:</b>	
Adjacent node Network ID	_____
Adjacent node Control point name	_____
Adjacent node type	<input type="checkbox"/> NN <input type="checkbox"/> EN <input type="checkbox"/> LEN
<b>Dependent LU Requester (DLUR) Parameters</b>	
Adjacent node identifier	_____ (hexadecimal)
XID receipt supported	<input type="checkbox"/> Yes <input type="checkbox"/> No
Primary Dependent LU Server (DLUS):	
Primary DLUS Network identifier	_____
Primary DLUS Server name	_____
Backup DLUS	<input type="checkbox"/> Yes <input type="checkbox"/> No
Backup DLUS:	
Network identifier	_____
Server name	_____

## X.25 Station – Adjacent Node – Remote LUs

<i>Table 41. X.25 Station – Adjacent Node – Remote LUs</i>	
<b>Remote LU</b>	
Network Identifier	_____
Remote LU name	_____
Wildcard Entry (WE)	<input type="checkbox"/> Full (F) <input type="checkbox"/> Partial (P) <input type="checkbox"/> No (N)
<b>Adjacent Node</b>	
Network Identifier	_____
Control point name	_____
Comments	_____ _____

## IP over X.25 – Station Parameters

<i>Table 42. IP over X.25 – Station Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Station name:</b> _____ <b>X.25 remote DTE address:</b> _____ <b>PVC logical channel number:</b> _____	
Automatic reactivation	<input type="checkbox"/> Yes <input type="checkbox"/> No
Remote IP address	_____ numerical

## X.25 Station – SVC Call Requests User Facilities and Data

Table 43. X.25 Station – SVC Call Requests User Facilities and Data	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Network:</b> _____ <b>Station name:</b> _____ <b>X.25 remote DTE address:</b> _____	
Protocol identifier	<input type="checkbox"/> x'CB' <input type="checkbox"/> x'C3' <input type="checkbox"/> x'CC'
Window size negotiation facility	<input type="checkbox"/> In _____numerical (1-7, default 2) Out _____numerical (1-7, default 2)
Packet size negotiation facility	<input type="checkbox"/> In _____bytes (128) Out _____bytes (128)
Request reverse charging facility	<input type="checkbox"/>
Request inter-network call redirection and deflection (ICRD) control facilities	<input type="checkbox"/>
ICRD status selection	<input type="checkbox"/> <i>Prevention requested</i> <input type="checkbox"/> Allowance requested
Add calling DTE address	<input type="checkbox"/>
Throughput class negotiation facility Format	<input type="checkbox"/> <input type="checkbox"/> <i>Basic</i> <input type="checkbox"/> Extended In _____Kbps (default: 9.6) Out _____Kbps (default: 9.6)
Closed user group selection facility With outgoing access Format	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <i>Basic</i> <input type="checkbox"/> Extended _____numerical (1-99, default: 0)

## X.25 Station – SVC Call Requests User Facilities and Data (UFD)

Table 44. X.25 Station – SVC Call Requests User Facilities and Data (UFD)	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Network:</b> _____ <b>Free UFD space (hex):</b> _____ <b>Station name:</b> _____ <b>X.25 remote DTE address:</b> _____	
NUI selection facility	<input type="checkbox"/> Size (min-max) _____hex (1-218)
RPOA selection facility Format	<input type="checkbox"/> <input type="checkbox"/> Basic <input type="checkbox"/> <i>Extended</i> _____numerical (1000-9999, default: 1000) Size (min-max) _____bcd (4-216)
Transit delay selection and indication facility	<input type="checkbox"/> _____milliseconds (0-65534, default: 1)
Non-standard user facilities (marker(s) requested)	<input type="checkbox"/> Size (min-max) _____hex (1-218, default: 00)
Call user data PI	<input type="checkbox"/> _____hex (2-30)

## X.25 Station – SVC Calling DTE Address

<i>Table 45. X.25 Station – SVC Calling DTE Address</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Network:</b> _____ <b>Station name:</b> _____ <b>X.25 remote DTE address:</b> _____	
<b>Calling DTE address</b>	
TOA	<input type="checkbox"/> <i>Network dependent (0)</i> <input type="checkbox"/> International (1) <input type="checkbox"/> National (2)
NPI	<input type="checkbox"/> X.121 (3) <input type="checkbox"/> E.164 (1)
Calling DTE address _____	

## Serial Port – IP Access Controls

<i>Table 46. Serial Port – Access Controls</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Packet filter type	<input type="checkbox"/> <i>Input (I)</i> <input type="checkbox"/> <i>Output (O)</i>
Access control type	<input type="checkbox"/> <i>Permit/Inclusive (I)</i> <input type="checkbox"/> <i>Deny/Exclusive (E)</i>
Source Network IP address	_____ (IP dotted notation)
Source Mask address	_____ (IP dotted notation)
Destination Network IP address	_____ (IP dotted notation)
Destination Mask address	_____ (IP dotted notation)
Protocol number: From	_____ numerical (0 – 255, default: 0)
Protocol number: To	_____ numerical (0 – 255, default: 255)
Port number: From	_____ numerical (0 – 65535, default: 0)
Port number: To	_____ numerical (0 – 65535, default: 65535)

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## Token-ring Configuration Sheets

To quickly locate a worksheet:

- Token-Ring Port Configuration, page 54
- Token-Ring Port Configuration – DLC Parameters, page 55
- Token-Ring Port Configuration – APPN Parameters, page 56
- Token-Ring Port – Connection Network Configuration, page 57
- Token-Ring Port – Station Configuration, page 57
- IP over Token-Ring Parameters, page 58 and page 59
- Token-Ring Station – DLC Parameters, page 60
- Token-Ring Station – APPN Parameters, page 61.

## Token-Ring Port Configuration

<i>Table 47. Token-Ring Port Identification</i>	
<b>Port number:</b> _____	
Network	<input type="checkbox"/> APPN <input type="checkbox"/> IP
APPN Name	_____ (alphanumeric characters)
IP Name	_____ (alphanumeric characters)
Speed	<input type="checkbox"/> 4 Mbps <input type="checkbox"/> 16 Mbps
Local MAC address (LAA or UAA)	_____ hexadecimal
APPN Local SAP (LSAP)	_____ hexadecimal (04 - 9C, default: 8)
IP maximum transmission unit	_____ bytes (516 - 17749, default: 2052)
Comments	_____ _____



## Token-Ring Port Configuration – DLC Parameters

<i>Table 48. Token-Ring Port Configuration – DLC Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Limited resources	<input type="checkbox"/> Yes <input type="checkbox"/> No
T1 reply timer (LOCALT0):	_____ tenths of a second (6–200,default: 100)
T2 acknowledgment timer (LOCALT2):	_____ tenths of a second (0–20,default: 2)
Inactivity timer (TITIMER):	_____ seconds (60–254,default: 60)
Maximum transmitted frames before acknowledgment received (MAXOUT):	_____ seconds (1–127,default: 8)
Maximum received frames before acknowledgment sent (MAXIN):	_____ seconds (1–127,default: 6)
RNR limit (RNRLIMIT):	_____ seconds (60–5400,default: 180)
Authorize infinite retries?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Retries per retry sequence (RETRIES-m):	_____ seconds (0–128,default: 6)
Retry sequences (RETRIES-n):	_____ seconds (0–127,default: 0)
Pause between retry sequences (RETRIES-t):	_____ seconds (0–254,default: 0)

## Token-Ring Port Configuration – APPN Parameters

Table 49. Token-Ring Port Configuration – APPN Parameters

<b>Port number:</b> _____ <b>Port name :</b> _____ <b>Host link name:</b> _____	
Accept any incoming call	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes Maximum number of incoming calls _____ (0-1250, default: 1250)
Automatic reactivation	<input type="checkbox"/> Yes <input type="checkbox"/> No
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
Maximum receive PIU size	_____ bytes (99-8000, default: 2058)
Maximum sent PIU size	_____ bytes (99-8000, default: 2058)
HPR support	<input type="checkbox"/> <i>No ERP preferred</i> <input type="checkbox"/> ERP not allowed <input type="checkbox"/> ERP required <input type="checkbox"/> No HPR support
Propagation delay	<input type="checkbox"/> Minimum <input type="checkbox"/> LAN <input type="checkbox"/> Telephone <input type="checkbox"/> Packet Switched Network <input type="checkbox"/> Satellite <input type="checkbox"/> Maximum
Security	<input type="checkbox"/> <i>Non-secure</i> <input type="checkbox"/> Public Switched <input type="checkbox"/> Underground Cable <input type="checkbox"/> Secure Conduit <input type="checkbox"/> Guarded Conduit <input type="checkbox"/> Encrypted <input type="checkbox"/> Guarded Radiation
Relative cost per byte	_____ (0-255, default: 0)
Relative cost per unit of time	_____ (0-255, default: 0)
User defined 1	_____ (0-255, default: 0)
User defined 2	_____ (0-255, default: 0)
User defined 3	_____ (0-255, default: 0)

## Token-Ring Port – Connection Network Configuration

<i>Table 50. Connection Network Parameters</i>	
<b>Port number:</b> _____	
<b>Port name:</b> _____	
Network identifier	_____ (alphanumeric characters)
CN name	_____ (alphanumeric characters)

## Token-Ring Port – Station Configuration

<i>Table 51. Token-Ring Station Identification</i>	
<b>Port number:</b> _____	
<b>Port name:</b> _____	
Name	_____ (alphanumeric characters)
Remote MAC address (LAA or UAA)	_____ (hexadecimal)
Remote SAP (RSAP)	_____ hexadecimal (02–FE, default:4)
Comments	_____ _____

## IP over Token-Ring Parameters

<i>Table 52. IP over Token-Ring Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____	
Automatic reactivation	<input type="checkbox"/> Yes <input type="checkbox"/> No
Enable source routing	<input type="checkbox"/> Yes <input type="checkbox"/> No
RIF timer	_____ decimal (0–4096, default: 120)
IP address	_____ (IP dotted notation)
IP subnet mask	_____ (IP dotted notation)

## IP Access Controls

<i>Table 53. IP Access Controls</i>	
<b>Port number:</b> _____	
Packet filter type (PFT)	<input type="checkbox"/> <i>Input (I)</i> <input type="checkbox"/> <i>Output (O)</i>
Access control type	<input type="checkbox"/> <i>Permit/Inclusive (I)</i> <input type="checkbox"/> <i>Deny/Exclusive (E)</i>
Source Network IP address	_____ (IP dotted notation)
Source Mask address	_____ (IP dotted notation)
Destination Network IP address	_____ (IP dotted notation)
Destination Mask address	_____ (IP dotted notation)
Protocol number: From	_____numerical (0 – 255, default: 0)
Protocol number: To	_____numerical (0 – 255, default: 255)
Port number: From	_____numerical (0 – 65535, default: 0)
Port number: To	_____numerical (0 – 65535, default: 65535)

## Token-Ring Station – DLC Parameters

<i>Table 54. Token-Ring Station – DLC Parameters</i>	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Station name:</b> _____	
Limited resources	<input type="checkbox"/> Yes <input type="checkbox"/> No
Use port values as default	<input type="checkbox"/>
T1 reply timer (LOCALT0):	_____ tenths of a second (6–200, default: 100)
T2 acknowledgment timer (LOCALT2):	_____ tenths of a second (0–20, default: 2)
Inactivity timer (TITIMER):	_____ seconds (60–254, default: 60)
Maximum transmitted frames before acknowledgment received (MAXOUT):	_____ (1–127, default: 8)
Maximum received frames before acknowledgment sent (MAXIN):	_____ (1–127, default: 6)
RNR limit (RNRLIMIT):	_____ seconds (60–5400, default: 180)
Authorize infinite retries?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Retries per retry sequence (RETRIES-m):	_____ (0–128, default: 6)
Retry sequences (RETRIES-n):	_____ (0–127, default: 0)
Pause between retry sequences (RETRIES-t):	_____ (0–254, default: 0)

## Token-Ring Station – APPN Parameters

Table 55 (Page 1 of 2). Token-Ring Station – APPN Parameters	
<b>Port number:</b> _____ <b>Port name:</b> _____ <b>Host link name (APPN):</b> _____ <b>Host link name (IP):</b> _____	
Activated at startup	<input type="checkbox"/> Yes <input type="checkbox"/> No
CP-CP session support	<input type="checkbox"/> Yes <input type="checkbox"/> No
Automatic re-activation	<input type="checkbox"/> Yes <input type="checkbox"/> No
NPA eligible	<input type="checkbox"/> Yes <input type="checkbox"/> No
HPR support	<input type="checkbox"/> <i>No ERP preferred</i> <input type="checkbox"/> ERP required <input type="checkbox"/> ERP not allowed <input type="checkbox"/> No HPR support
<b>TG characteristics</b>	
Propagation delay	<input type="checkbox"/> Minimum <input type="checkbox"/> LAN <input type="checkbox"/> Telephone <input type="checkbox"/> Packet Switched Network <input type="checkbox"/> Satellite <input type="checkbox"/> Maximum
Security	<input type="checkbox"/> <i>Non secure</i> <input type="checkbox"/> Public Switched <input type="checkbox"/> Underground Cable <input type="checkbox"/> Secure Conduit <input type="checkbox"/> Guarded Conduit <input type="checkbox"/> Encrypted <input type="checkbox"/> Guarded Radiation
Effective capacity	_____ bps (0-15999900, default: 15999900)
Relative cost per byte	_____ (0-255, default: 0)
Relative cost per unit of time	_____ (0-255, default: 0)
User defined 1	_____ (0-255, default: 0)
User defined 2	_____ (0-255, default: 0)
User defined 3	_____ (0-255, default: 0)
<b>Multilink Transmission Group (MLTG) and Activate on Demand (AOD) Parameters</b>	
	<input type="checkbox"/> MLTG <input type="checkbox"/> AOD
MLTG name	_____

<i>Table 55 (Page 2 of 2). Token-Ring Station – APPN Parameters</i>	
TG number	_____ (default=1)
<b>AOD parameters</b>	
Adjacent node Network ID	_____
Adjacent node Control point name	_____
Adjacent node type	<input type="checkbox"/> NN <input type="checkbox"/> EN <input type="checkbox"/> LEN
<b>Remote LU</b>	
Network Identifier	_____
Remote LU name	_____
Wildcard Entry (WE)	<input type="checkbox"/> Full (F) <input type="checkbox"/> Partial (P) <input type="checkbox"/> No (N)
<b>Adjacent Node</b>	
Network Identifier	_____
Control point name	_____
Comments	_____ _____
<b>Dependent LU Requester (DLUR) Parameters</b>	
Adjacent node identifier	_____ (hexadecimal)
XID receipt supported	<input type="checkbox"/> Yes <input type="checkbox"/> No
Primary Dependent LU Server (DLUS):	
Primary DLUS Network identifier	_____
Primary DLUS Server name	_____
Backup DLUS	<input type="checkbox"/> Yes <input type="checkbox"/> No
Backup DLUS:	
Network identifier	_____
Server name	_____



## Network Node, Focal Point, and DLUR Worksheets

### Network Node and DLUR Configuration Parameters

<i>Table 56 (Page 1 of 2). NN/FP/DLUR Configuration</i>	
<b>Network Node and Focal Point Parameters</b>	
<b>Network Node:</b>	
Network Identifier	_____
Control point name	_____
Comments	_____ _____
<b>Network Management Focal Point</b>	
Network Identifier	_____
Control point name	_____
HPR Support	<input type="checkbox"/> HPR base (ANR) <input type="checkbox"/> No HPR support <input type="checkbox"/> HPR transport tower <input type="checkbox"/> HPR control flow tower
<b>Dependent LU Requester (DLUR) Parameters</b>	
<b>Primary dependent LU server (DLUS)</b>	
Network Identifier	_____
Control point name	_____
Backup DLUS?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Backup DLUS</b>	
Network identifier	_____
Control point name	_____
<b>DLUR retry parameters</b>	
No retries	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Short retries</b>	
No short retries	<input type="checkbox"/> Yes <input type="checkbox"/> No
Number of short retries	_____ (1-32767, default: 5)
Waiting time before short retries	_____seconds ([1])–120, default: 10)
<b>Long retries</b>	
No long retries	<input type="checkbox"/> Yes <input type="checkbox"/> No
Number of long retries	_____ (1-32767, default: 5)
Waiting time before long retries	_____seconds (30 – 1200, default: 30)
<b>Backup Focal Point Parameters</b>	

<i>Table 56 (Page 2 of 2). NN/FP/DLUR Configuration</i>	
Network Identifier	_____
Control point name	_____

## Network Node Characteristics

<i>Table 57. Network Node Characteristics</i>	
Number of destination LUS location cache entries	_____numerical (10 – 32765, default: 5000)
Route addition resistance	_____numerical (0 – 255, default: 128)
Number of times TRS tree is used before recalculation	_____numerical (2 – 15, default: 10)

## RTP Parameters

<i>Table 58. RTP Parameters</i>	
Maximum number of sessions per RTP connection	_____numerical (1 – 65535, default: 100)
Maximum number of sessions of RTP retries	_____numerical (0 – 10, default: 6)
RTP liveness timer	_____seconds (60 – 3600, default: 180)
Low path switch timer	_____seconds (0 – 7200, default: 480)
Medium path switch timer	_____seconds (0 – 7200, default: 240)
High path switch timer	_____seconds (0 – 7200, default: 120)
Network path switch timer	_____seconds (0 – 7200, default: 60)

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## IP Configuration Sheets

To quickly locate a configuration sheet:

IP General Parameters, page 66

IP Static Routes, page 67

IP Access Controls, page 68

PPP NCP Default Parameters, page 69

IP Filters, page 69

BOOTP Forwarding, page 69.

## IP General Parameters

<i>Table 59. IP General Parameters</i>	
Enable forwarding of directed broadcast	<input type="checkbox"/>
Enable per packet multipath (for OSPF only)	<input type="checkbox"/>
Enable source-routing	<input type="checkbox"/>
Enable same subnet	<input type="checkbox"/>
Routing table entries in the NN	_____numerical (64 – 5000, default: 768)
Number of destination addresses in the cache per processor	_____numerical (64 – 5000, default: 64)
Reassembly buffer size	_____bytes (2048 – 65535, default: 12288)
IP default ttl value	_____numerical (1 – 255, default: 60)
Router_ID (optional)	_____ (IP dotted notation, default: 0.0.0.0.)

## IP Static Routes

<i>Table 60. IP Static Routes</i>		
<b>Configure a Static Route</b>		
Default route	<input type="checkbox"/>	
Destination network	_____ (IP dotted notation)	
Destination mask	_____ (IP dotted notation)	
Next hop address	_____	(IP dotted notation)
Next hop address	_____	(IP dotted notation)
Next hop address	_____	(IP dotted notation)
Next hop address	_____	(IP dotted notation)
Cost (administrative distance)	_____	numerical (1 – 16, default: 1)
Cost (administrative distance)	_____	numerical (1 – 16, default: 1)
Cost (administrative distance)	_____	numerical (1 – 16, default: 1)
Cost (administrative distance)	_____	numerical (1 – 16, default: 1)

## IP Access Controls

<i>Table 61. IP Access Controls</i>	
<b>Configure an Access Control Entry</b>	
Packet filter type	<input type="checkbox"/> <i>Input (I)</i> <input type="checkbox"/> <i>Output (O)</i>
Access control type	<input type="checkbox"/> <i>Permit/Inclusive (I)</i> <input type="checkbox"/> <i>Deny/Exclusive (E)</i>
Source Network IP address	_____ (IP dotted notation)
Source Mask address	_____ (IP dotted notation)
Destination Network IP address	_____ (IP dotted notation)
Destination Mask address	_____ (IP dotted notation)
Protocol number: From	_____numerical (0 – 255, default: 0)
Protocol number: To	_____numerical (0 – 255, default: 255)
Port number: From	_____numerical (0 – 65535, default: 0)
Port number: To	_____numerical (0 – 65535, default: 65535)

## PPP NCP Default Parameters

<i>Table 62. PPP NCP Default Parameters</i>	
Retry timer	_____ ms (200 – 30000, default: 3000)
Config tries	_____ numerical (1 – 100, default: 20)
NAK tries	_____ numerical (1 – 100, default: 10)
Terminate tries	_____ numerical (1 – 100, default: 10)

## IP Filters

<i>Table 63. IP Filters</i>	
<b>Addresses</b>	
IP address:	_____ (IP dotted notation)
Subnet mask:	_____ (IP dotted notation)

## BOOTP Forwarding

<i>Table 64. BOOTP Forwarding</i>	
Enable BOOTP forwarding	<input type="checkbox"/>
<b>General</b>	
Maximum hops	_____ numerical (1 – 16, default: 4)
Minimum time before forwarding	_____ seconds (0 – 255, default: 1)
<b>BOOTP Forwarding Address</b>	
BOOTP server address:	_____ (IP dotted notation)

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## OSPF Configuration Sheets

To quickly locate a worksheet:

- OSPF General/Multicast Parameters, page 70
- OSPF Imported/Default Routes, page 71
- OSPF Area Configuration, page 72
- OSPF Area Ranges, page 72
- OSPF/RIP Parameters Per IP Address, page 72
- OSPF Parameters Per IP Address, page 73
- OSPF Neighbors, page 74
- OSPF Virtual Links, page 74.

## OSPF General/Multicast Parameters

<i>Table 65. OSPF General/Multicast Parameters</i>	
<b>General OPFF Parameters</b>	
Enable OSPF	<input type="checkbox"/>
Number of AS external routes	_____numerical (0 – 4000, default: 100)
Number of OSPF routers	_____seconds (0 – 4000, default: 50)
<b>Multicast</b>	
Enable intra-area multicasting	<input type="checkbox"/>
Enable inter-area multicasting	<input type="checkbox"/>
Group address	_____ (IP dotted notation)



## OSPF Imported/Default Routes

<i>Table 66. OSPF Imported/Default Routes</i>	
Import static routes	<input type="checkbox"/>
Enable routes import	<input type="checkbox"/>
Import RIP routes	<input type="checkbox"/>
Import BGP routes	<input type="checkbox"/>
Import direct routes	<input type="checkbox"/>
Import subnet routes	<input type="checkbox"/>
Enable BGP auto-tag generation	<input type="checkbox"/>
Compare RIP/static routes to OSPF routes	<input type="checkbox"/> 1 <input type="checkbox"/> 2
<b>Originate Default Route</b>	
Always originate default route	<input type="checkbox"/>
Originate default route if BGP routes available	<input type="checkbox"/>
From AS number	_____numerical (1 – 65535, default: 1)
To network IP address	_____ (IP dotted notation)
Originate as type	<input type="checkbox"/> 1 <input type="checkbox"/> 2
Default route cost	_____numerical (1 – 65535, default: 1)
Forwarding network IP address	_____ (IP dotted notation)

## OSPF Area Configuration

<i>Table 67. OSPF Area Configuration</i>	
<b>Configure an OSPF Area</b>	
Area number	_____ (IP dotted notation)
Stub area	<input type="checkbox"/>
Authentication (A)	<input type="checkbox"/>
Default cost	_____ numerical (1 – 65535, default: 1)
Import summaries (IS)	<input type="checkbox"/>

## OSPF Area Ranges

<i>Table 68. OSPF Area Ranges</i>	
<b>OSPF area:</b> _____	
<b>Configure an Area Range</b>	
IP address:	_____ (IP dotted notation)
IP subnet mask:	_____ (IP dotted notation)
Advertise (A)	<input type="checkbox"/>

## OSPF/RIP Parameters Per IP Address

<i>Table 69. OSPF/RIP Parameters Per IP Address</i>	
<b>IP Address:</b> _____	
Add OSPF (O)	<input type="checkbox"/>
Add RIP (R)	<input type="checkbox"/>

## OSPF Parameters Per IP Address

<i>Table 70. OSPF Parameters Per IP Address</i>	
<b>IP Address:</b> _____	
<b>General Parameters</b>	
Area number	_____ (IP dotted notation, default: 0.0.0.0)
Authentication key	_____ (alphanumeric characters)
Cost (TOS 0)	_____ numerical (1 – 65535, default: 1)
Priority	_____ numerical (0 – 255, default: 1)
<b>Timers (Seconds)</b>	
Retransmit interval	_____ seconds (1 – 65535, default: 5)
Transmit delay	_____ seconds (1 – 65535, default: 1)
Dead interval	_____ seconds (2 – 65535, default: 40)
Hello interval	_____ seconds (1 – 255, default: 10)
<b>Multicast Externals</b>	
Enable multicast	<input type="checkbox"/>
Forward/receive as unicasts	<input type="checkbox"/>
IGMP polling interval	_____ seconds (1 – 65535, default: 60)
IGMP timeout	_____ seconds (1 – 65535, default: 180)
<b>Non-Broadcast</b>	
Non-broadcast	<input type="checkbox"/>
Polling interval	_____ seconds (1 – 65535, default: 120)

## OSPF Neighbors

<i>Table 71. OSPF Neighbors</i>	
<b>IP Address:</b> _____	
<b><i>Neighbor Addresses</i></b>	
Neighbor IP address	_____ (IP dotted notation)
Designated router eligible (E)	<input type="checkbox"/>

## OSPF Virtual Links

<i>Table 72. OSPF Virtual Links</i>	
<b><i>Configure an OSPF Virtual Link</i></b>	
Router ID (neighbor IP address)	_____ (IP dotted notation)
Retransmit interval (RI)	_____seconds (1 – 65535, default: 10)
Transmit delay (TD)	_____seconds (1 – 65535, default: 5)
Dead interval (DI)	_____seconds (2 – 65535, default: 180)
Hello interval	_____seconds (1 – 255, default: 30)
Authentication key	_____ (alphanumeric characters)
Link's transit area	_____ (IP dotted notation, default: 0.0.0.0)

## RIP Configuration Sheets

### RIP General Parameters

<i>Table 73. RIP General Parameters</i>	
Enable RIP	<input type="checkbox"/>
<b>Originate Default Route</b>	
Always originate default route	<input type="checkbox"/>
Originate default route if BGP routes available	<input type="checkbox"/>
From AS number	_____numerical (1 – 65535, default: 1)
To network number	_____ (IP dotted notation)
Originate default route if OSPF routes available	<input type="checkbox"/>
Default route cost	_____numerical (1 – 16, default: 1)
<b>Route Acceptance</b>	
Network address	_____ (IP dotted notation)

### RIP Parameters Per IP Address

<i>Table 74. RIP Parameters Per IP Address</i>	
<b>IP Address:</b> _____	
Broadcast address style	<input type="checkbox"/> Network <input type="checkbox"/> Local-wire
Address fill style	<input type="checkbox"/> Zeroes <input type="checkbox"/> Ones
Interface tag (AS number)	_____numerical (1 – 65535, default: 1)
Send RIP routes	<input type="checkbox"/> (default: √)
Send net routes	<input type="checkbox"/> (default: √)
Send subnet routes	<input type="checkbox"/> (default: √)
Send host routes	<input type="checkbox"/> (default: √)
Send static routes	<input type="checkbox"/>
Send default routes	<input type="checkbox"/>
Receive RIP	<input type="checkbox"/> (default: √)
Receive net routes	<input type="checkbox"/> (default: √)
Receive subnet routes	<input type="checkbox"/> (default: √)
Receive host routes	<input type="checkbox"/> (default: √)
Override static routes	<input type="checkbox"/>
Override default routes	<input type="checkbox"/>

---

## BGP Configuration Sheets

To quickly locate a worksheet:

BGP General Parameters/Excluded AS, page 76

BGP Receive Policies, page 76

BGP Send Policies, page 77

BGP Originate Policies, page 77

BGP Aggregate Routes, page 77

BGP Neighbors, page 78.

### BGP General Parameters/Excluded AS

<i>Table 75. BGP General Parameters/Excluded AS</i>	
Enable BGP	<input type="checkbox"/>
Send subnet routes	<input type="checkbox"/>
AS number	_____numerical (1 – 65535, default: 1)
TCP segment size	_____bytes (28 – 65535, default: 2024)
<b><i>Excluded Autonomous Systems (AS)</i></b>	
AS no. to exclude	_____numerical (1 – 65535, default: 1)

### BGP Receive Policies

<i>Table 76. BGP Receive Policies</i>	
<b><i>Configure a Receive Policy</i></b>	
Policy type	<input type="checkbox"/> <i>Inclusive (I)</i> <input type="checkbox"/> <i>Exclusive (E)</i>
Address match (AM)	<input type="checkbox"/> <i>Exact (E)</i> <input type="checkbox"/> <i>Range (R)</i>
Network IP address	_____ (IP dotted notation)
Network mask	_____ (IP dotted notation)
IGP metric	_____numerical (1 – 65535, default: 1)
Originating AS number	_____numerical (0 – 65535, default: 0)
Adjacent AS number	_____numerical (0 – 65535, default: 0)

## BGP Send Policies

<i>Table 77. BGP Send Policies</i>	
<b>Configure a BGP Send Policy</b>	
Policy type	<input type="checkbox"/> <i>Inclusive (I)</i> <input type="checkbox"/> <i>Exclusive (E)</i>
Address match (AM)	<input type="checkbox"/> <i>Exact (E)</i> <input type="checkbox"/> <i>Range (R)</i>
Network IP address	_____ (IP dotted notation)
Network mask	_____ (IP dotted notation)
Tag	_____numerical (0 – 65535, default: 0)
Adjacent AS number	_____numerical (0 – 65535, default: 0)

## BGP Originate Policies

<i>Table 78. BGP Originate Policies</i>	
<b>Configure a BGP Originate Policy</b>	
Policy type	<input type="checkbox"/> <i>Inclusive (I)</i> <input type="checkbox"/> <i>Exclusive (E)</i>
Address match (AM)	<input type="checkbox"/> <i>Exact (E)</i> <input type="checkbox"/> <i>Range (R)</i>
Network IP address	_____ (IP dotted notation)
Network mask	_____ (IP dotted notation)
Tag	_____numerical (0 – 65535, default: 0)

## BGP Aggregate Routes

<i>Table 79. BGP Aggregate Routes</i>	
<b>Aggregate Routes</b>	
Network IP address	_____ (IP dotted notation)
Network mask	_____ (IP dotted notation)

## BGP Neighbors

<i>Table 80. BGP Neighbors</i>	
<b>Configure a BGP Neighbor</b>	
IP address:	_____ (IP dotted notation)
Enable neighbor	<input type="checkbox"/> (default: <input checked="" type="checkbox"/> )
AS number	_____ numerical (1 – 65535, default: 1)
Initialization timer	_____ seconds (0 – 65535, default: 12)
Connect retry timer	_____ seconds (0 – 65535, default: 120)
Hold timer	_____ seconds (0 – 65535, default: 90)
TCP segment size	_____ bytes (28 – 65535, default: 2024)



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## ARP Configuration Sheet

<i>Table 81. ARP Parameters</i>	
<b>General Parameters</b>	
Enable ARP net routing	<input type="checkbox"/>
Enable ARP subnet routing	<input type="checkbox"/>
Enable auto refresh	<input type="checkbox"/>
Refresh timer	_____ minutes (0 – 1000, default: 5)
<b>Configure an ARP entry</b>	
Port number	_____ (default: 2080)
Remote IP address	_____ (IP dotted notation)
Remote MAC address	_____ (12 hexadecimal characters)

---

## SNMP Configuration Sheet

<i>Table 82. SNMP Port Identification</i>	
Access type	<input type="checkbox"/> <i>Read</i> <input type="checkbox"/> Trapdest
Community Name	_____ (alphanumeric characters)
UDP transport IP network address	_____ (IP dotted notation)
UDP transport Mask address	_____ (IP dotted notation)

---

## Chapter 2. Multiaccess Enclosure Worksheets

These worksheets are provided to help you with your MAE planning before actually entering values into the Controller Configuration and Management (*CCM User's Guide*, SH11-3081) application. Correctly filled-out worksheets for each controller configuration can save you considerable time when you start using the *CCM User's Guide*, SH11-3081.

The worksheets are:

- Quick Configuration Worksheet
- Initial Configuration Worksheet
- Token-Ring Configuration Worksheet
- LLC Configuration Worksheet
- Ethernet Configuration Worksheet
- Point-to-Point Protocol Configuration Worksheet
- Frame Relay Configuration Worksheet
- X.25 Configuration Worksheet
- SDLC Configuration Worksheet
- ISDN Configuration Worksheet.

## Quick Configuration Worksheet

Completed by: \_\_\_\_\_

Date: \_\_\_\_\_

Multiaccess Enclosure Name: \_\_\_\_\_

Adapter Type?	<input type="checkbox"/> Token-Ring	<input type="checkbox"/> Ethernet	<input type="checkbox"/> Other _____
Port (Interface) Number	_____		
<b>Bridging</b>			
Configure <b>Bridging</b> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Configure SRT Bridging?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Bridge No. (0–F)	<input type="checkbox"/> A †	<input type="checkbox"/> Other _____	
Configure Interface ____ (0–xx)?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Configure Source Routing on this interface?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Segment No. (1–FFF)	<input type="checkbox"/> A †	<input type="checkbox"/> Other _____	
<b>Save this configuration?</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>Protocols</b>			
Configure <b>Protocols</b> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Configure IP?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Configure Interface ____ (0–xx)?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Configure IP on this interface?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
IP address	_____	Address Mask	_____
Enable Dynamic Routing?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Enable OSPF?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>Save this configuration?</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>IPX</b>			
Configure <b>IPX</b> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Configure Interface ____ (0–xx)?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Configure IPX on this interface?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>Token-Ring</b> encapsulation ( <i>frame</i> ) type?			
<input type="checkbox"/> TOKEN—RING MSB †			
<input type="checkbox"/> TOKEN—RING LSB			
<input type="checkbox"/> TOKEN—RING_SNAP MSB			
<input type="checkbox"/> TOKEN—RING_SNAP LSB			

<b>Ethernet</b> encapsulation ( <i>frame</i> ) type?			
ETHERNET_8022			
ETHERNET_8023			
ETHERNET_ii			
ETHERNET_SNAP			
Network No. (1–FFFFFFE)	_____		
Enable IPXWAN?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Host No. for Serial Lines	_____		
Configure IPXWAN Node ID?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Node ID (1–FFFFFFE)	<input type="checkbox"/> 1 †	<input type="checkbox"/> Other _____	
<b>Save this configuration?</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>DNA (DECNet)</b>			
Configure <b>DNA</b> ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Highest Node No. (1–1023)	<input type="checkbox"/> 32 †	<input type="checkbox"/> Other _____	
Router Level	<input type="checkbox"/> Proteon Level1 †	<input type="checkbox"/> Proteon Level2	<input type="checkbox"/> DEC Level1 <input type="checkbox"/> DEC Level2
Highest Area (1–63)	<input type="checkbox"/> 63 †	<input type="checkbox"/> Other _____	
Node address _____	Address Mask _____		
Configure DNA on Interface ____?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Max Routers (1–33)?	<input type="checkbox"/> 16 †	<input type="checkbox"/> Other _____	
<b>Save this configuration?</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>Note:</b> † = default			

## Initial Configuration Worksheet

Table 83. Initial Configuration Worksheet			
<input type="checkbox"/> Add	<input type="checkbox"/> Device	<input type="checkbox"/> Token-Ring	Slot #: _____ Port #: _____
		<input type="checkbox"/> Ethernet	Slot #: _____ Port #: _____
		<input type="checkbox"/> ATM	Slot #: _____
		<input type="checkbox"/> ISDN (T1/J1)	Slot #: _____
		<input type="checkbox"/> ISDN (E1)	Slot #: _____
		<input type="checkbox"/> X.21	Slot #: _____ Port #: _____
		<input type="checkbox"/> V.35/V.36	Slot #: _____ Port #: _____
		<input type="checkbox"/> EIA-232E/V.24	Slot #: _____ Port #: _____
		<input type="checkbox"/> Dial Circuits	

## Token-Ring Configuration Worksheet

☐ Accept all defaults

Table 84. Token-Ring Configuration Worksheet		
<input type="checkbox"/> Frame	<input type="checkbox"/> Token-Ring  <input type="checkbox"/> Token-Ring_SNAP	<input type="checkbox"/> MSB <input type="checkbox"/> LSB  <input type="checkbox"/> MSB <input type="checkbox"/> LSB
<input type="checkbox"/> Media	<input type="checkbox"/> Shielded † <input type="checkbox"/> Unshielded	
<input type="checkbox"/> Packet-Size	<input type="checkbox"/> 4 Mbps  <input type="checkbox"/> 16 Mbps	<input type="checkbox"/> 2052 † <input type="checkbox"/> 4399  <input type="checkbox"/> 1470 <input type="checkbox"/> 2052 <input type="checkbox"/> 4399 <input type="checkbox"/> 8130 <input type="checkbox"/> 11407 <input type="checkbox"/> 17749
<input type="checkbox"/> Set	<input type="checkbox"/> Physical-address  <input type="checkbox"/> RIF-Timer	<input type="checkbox"/> _____  <input type="checkbox"/> 120 † <input type="checkbox"/> _____
<input type="checkbox"/> Source-Routing	<input type="checkbox"/> Enable † <input type="checkbox"/> Disable	
<input type="checkbox"/> Speed	<input type="checkbox"/> 4 Mbps † <input type="checkbox"/> _____	
<input type="checkbox"/> LLC Config	<input type="checkbox"/> Yes <input type="checkbox"/> No	

## LLC Configuration Worksheet

☐ Accept all defaults

*Table 85. LLC Configuration Worksheet*

<input type="checkbox"/> Set	<input type="checkbox"/> n2-max-retry	<input type="checkbox"/> max-retry value	<input type="checkbox"/> 8 † <input type="checkbox"/> _____
	<input type="checkbox"/> n3-frames_rcvd-before-ack	<input type="checkbox"/> Number I-frames received before sending Ack	<input type="checkbox"/> 1 † <input type="checkbox"/> _____
	<input type="checkbox"/> rw-receive-window	<input type="checkbox"/> Receive window	<input type="checkbox"/> 2 † <input type="checkbox"/> _____
	<input type="checkbox"/> t1-reply-timer	<input type="checkbox"/> Reply timer	<input type="checkbox"/> 1 † <input type="checkbox"/> _____
	<input type="checkbox"/> t2-receive-ack-timer	<input type="checkbox"/> Receive Ack timer	<input type="checkbox"/> 1 † <input type="checkbox"/> _____
	<input type="checkbox"/> ti-inactivity-timer	<input type="checkbox"/> Inactivity timer	<input type="checkbox"/> 30 † <input type="checkbox"/> _____
	<input type="checkbox"/> tw-transmit window	<input type="checkbox"/> Transmit window	<input type="checkbox"/> 2 † <input type="checkbox"/> _____
	<input type="checkbox"/> nw-acks-to-inc-ww	<input type="checkbox"/> Acks needed to increment Ww	<input type="checkbox"/> 1 † <input type="checkbox"/> _____



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## Ethernet Configuration Worksheet

- ☐ Accept all defaults

<i>Table 86. Ethernet Configuration Worksheet</i>	
<input type="checkbox"/> ConnectorType	<input type="checkbox"/> BNC (10BASE2) <input type="checkbox"/> RJ-45 (10BASE-T)
<input type="checkbox"/> Frame	<input type="checkbox"/> Ethernet_11 <input type="checkbox"/> Ethernet_8022 <input type="checkbox"/> Ethernet_8023 <input type="checkbox"/> Ethernet_SNAP
<input type="checkbox"/> IP-Encapsulation	<input type="checkbox"/> Ethernet (e) <input type="checkbox"/> IEEE 802.3 (i)

## Point-to-Point Protocol Configuration Worksheet

- ☐ Accept all defaults

Table 87 (Page 1 of 2). Point-to-Point Protocol Configuration Worksheet			
<input type="checkbox"/> Disable	<input type="checkbox"/> ccp <input type="checkbox"/> chap <input type="checkbox"/> spap <input type="checkbox"/> dial-in-access <input type="checkbox"/> lower-dtr <input type="checkbox"/> pap		
<input type="checkbox"/> Enable	<input type="checkbox"/> ccp <input type="checkbox"/> chap <input type="checkbox"/> spap <input type="checkbox"/> dial-in-access <input type="checkbox"/> lower-dtr <input type="checkbox"/> pap		
<input type="checkbox"/> Set bcp	<input type="checkbox"/> Tinygram Compression	<input type="checkbox"/> No † <input type="checkbox"/> Yes	
<input type="checkbox"/> Set ccp options	<input type="checkbox"/> STAC: # histories <input type="checkbox"/> STAC: check mode	<input type="checkbox"/> 1 † <input type="checkbox"/> 0 <input type="checkbox"/> 3 = Seq. † <input type="checkbox"/> 0 = none <input type="checkbox"/> 1 = LCB <input type="checkbox"/> 2 = CRC	
<input type="checkbox"/> Set dial-in-access parameters	<input type="checkbox"/> Number of minutes online allotted <input type="checkbox"/> Default IP address <input type="checkbox"/> Enable ARP-SUBNET-ROUTING?	<input type="checkbox"/> 0 = unlimited † <input type="checkbox"/> _____ <input type="checkbox"/> 0.0.0.0 † <input type="checkbox"/> _____ <input type="checkbox"/> Yes † <input type="checkbox"/> No	

Table 87 (Page 2 of 2). Point-to-Point Protocol Configuration Worksheet

<input type="checkbox"/> Set	<input type="checkbox"/> HDLC cable  <input type="checkbox"/> HDLC clocking <input type="checkbox"/> HDLC encoding <input type="checkbox"/> HDLC idle <input type="checkbox"/> HDLC mode <input type="checkbox"/> HDLC speed (2400–2048000) <input type="checkbox"/> HDLC transmit-delay <input type="checkbox"/> IPCP   <input type="checkbox"/> LCP options    <input type="checkbox"/> LCP parameters	<input type="checkbox"/> RS-232 DTE <input type="checkbox"/> RS-232 DCE <input type="checkbox"/> v.35 DCE <input type="checkbox"/> v.35 DTE <input type="checkbox"/> v.36 <input type="checkbox"/> x.21 DCE <input type="checkbox"/> x.21 DTE <input type="checkbox"/> external <input type="checkbox"/> internal <input type="checkbox"/> NRZ † <input type="checkbox"/> NRZ1 <input type="checkbox"/> Flag † <input type="checkbox"/> Mark <input type="checkbox"/> Asynchronous <input type="checkbox"/> Synchronous <input type="checkbox"/> _____ <input type="checkbox"/> 0 † <input type="checkbox"/> _____ <input type="checkbox"/> IP compression <input type="checkbox"/> Number of slots <input type="checkbox"/> Send our IP address <input type="checkbox"/> Request their IP address <input type="checkbox"/> Maximum Receive Unit <input type="checkbox"/> Magic Number <input type="checkbox"/> Protocol Field Compression <input type="checkbox"/> Addr/Cntl Field Compression <input type="checkbox"/> Config tries <input type="checkbox"/> NAK tries <input type="checkbox"/> Terminate tries <input type="checkbox"/> Retry timer	<input type="checkbox"/> Yes † <input type="checkbox"/> No <input type="checkbox"/> 16 † <input type="checkbox"/> _____ <input type="checkbox"/> Yes † <input type="checkbox"/> No <input type="checkbox"/> Yes † <input type="checkbox"/> No <input type="checkbox"/> 2048 † <input type="checkbox"/> _____ <input type="checkbox"/> Yes † <input type="checkbox"/> No <input type="checkbox"/> No † <input type="checkbox"/> Yes <input type="checkbox"/> No † <input type="checkbox"/> Yes <input type="checkbox"/> 20 † <input type="checkbox"/> _____ <input type="checkbox"/> 10 † <input type="checkbox"/> _____ <input type="checkbox"/> 10 † <input type="checkbox"/> _____ <input type="checkbox"/> 3000 † <input type="checkbox"/> _____
<input type="checkbox"/> Set (cont.)	<input type="checkbox"/> name _____ <input type="checkbox"/> NCP parameters	<input type="checkbox"/> Enter Password <input type="checkbox"/> Enter Password again <input type="checkbox"/> Config tries <input type="checkbox"/> NAK tries <input type="checkbox"/> Terminate tries <input type="checkbox"/> Retry timer	<input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> 20 † <input type="checkbox"/> _____ <input type="checkbox"/> 10 † <input type="checkbox"/> _____ <input type="checkbox"/> 10 † <input type="checkbox"/> _____ <input type="checkbox"/> 3000 † <input type="checkbox"/> _____

## Frame Relay Configuration Worksheet

- ☐ Accept all defaults

Table 88 (Page 1 of 2). Frame Relay Configuration Worksheet

<input type="checkbox"/> Add	<div> <input type="checkbox"/> Permanent-Virtual-Circuit         </div>          <div> <input type="checkbox"/> Protocol-Address         </div>          <div> <input type="checkbox"/> PVC-Group         </div>	<div> <input type="checkbox"/> Circuit Number           <input type="checkbox"/> Committed Information Rate in bps           <input type="checkbox"/> Committed Burst Size in bits           <input type="checkbox"/> Excess Burst Size in bits           <input type="checkbox"/> Assign Circuit Name           <input type="checkbox"/> Is circuit required for interface operation           <input type="checkbox"/> Does the circuit belong to a required PVC group           <input type="checkbox"/> What is the group name           <input type="checkbox"/> Protocol name or number           <input type="checkbox"/> IP Address           <input type="checkbox"/> Host Number (in hex)           <input type="checkbox"/> Network Number           <input type="checkbox"/> Node Number           <input type="checkbox"/> Node Address           <input type="checkbox"/> Circuit Number           <input type="checkbox"/> PVC group name         </div>	<div> <input type="checkbox"/> 16 †           <input type="checkbox"/> _____           <input type="checkbox"/> 64000 †           <input type="checkbox"/> _____           <input type="checkbox"/> 64000 †           <input type="checkbox"/> _____           <input type="checkbox"/> 0 †           <input type="checkbox"/> _____           <input type="checkbox"/> _____           <input type="checkbox"/> No †           <input type="checkbox"/> Yes           <input type="checkbox"/> No †           <input type="checkbox"/> Yes           <input type="checkbox"/> _____           <input type="checkbox"/> _____           <input type="checkbox"/> _____           <input type="checkbox"/> _____           <input type="checkbox"/> _____           <input type="checkbox"/> 0.0 †           <input type="checkbox"/> _____           <input type="checkbox"/> 16 †           <input type="checkbox"/> _____           <input type="checkbox"/> _____         </div>
<input type="checkbox"/> Change	<div> <input type="checkbox"/> Permanent-Virtual-Circuit           <input type="checkbox"/> Protocol-Address           <input type="checkbox"/> PVC-Group         </div>		
<input type="checkbox"/> Disable	<div> <input type="checkbox"/> Cir-Monitor           <input type="checkbox"/> Congestion-Monitor           <input type="checkbox"/> Dn-Length-Field           <input type="checkbox"/> LMI           <input type="checkbox"/> Multicast-Emulation           <input type="checkbox"/> No-PVC           <input type="checkbox"/> Orphan-Circuits           <input type="checkbox"/> Protocol-Broadcast         </div>		

Table 88 (Page 2 of 2). Frame Relay Configuration Worksheet

<input type="checkbox"/> Enable	<input type="checkbox"/> Cir-Monitor <input type="checkbox"/> Congestion-Monitor <input type="checkbox"/> Dn-Length-Field <input type="checkbox"/> LMI <input type="checkbox"/> Multicast-Emulation <input type="checkbox"/> No-PVC <input type="checkbox"/> Orphan-Circuits <input type="checkbox"/> Protocol-Broadcast		
<input type="checkbox"/> Remove	<input type="checkbox"/> Permanent-Virtual-Circuit <input type="checkbox"/> Protocol-Address <input type="checkbox"/> PVC-Group	<input type="checkbox"/> Circuit Number <input type="checkbox"/> Protocol name or number <input type="checkbox"/> PVC group name	<input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
<input type="checkbox"/> Set	<input type="checkbox"/> cable x21 <input type="checkbox"/> clocking <input type="checkbox"/> encoding <input type="checkbox"/> frame-size <input type="checkbox"/> idle <input type="checkbox"/> ir-adjustment  <input type="checkbox"/> line-speed <input type="checkbox"/> lmi-type <input type="checkbox"/> n1-parameter <input type="checkbox"/> n2-parameter <input type="checkbox"/> n3-parameter <input type="checkbox"/> p1-parameter <input type="checkbox"/> t1-parameter <input type="checkbox"/> transmit-delay	<input type="checkbox"/> DTE <input type="checkbox"/> DCE <input type="checkbox"/> external <input type="checkbox"/> internal <input type="checkbox"/> NRZ † <input type="checkbox"/> NRZ1 <input type="checkbox"/> 2048 † <input type="checkbox"/> _____ <input type="checkbox"/> flag † <input type="checkbox"/> mark <input type="checkbox"/> IR adjustment % decrement <input type="checkbox"/> Minimum IR as % of CIR <input type="checkbox"/> Line speed <input type="checkbox"/> ANSI <input type="checkbox"/> REV1 <input type="checkbox"/> CCITT <input type="checkbox"/> Parameter N1 <input type="checkbox"/> Parameter N2 <input type="checkbox"/> Parameter N3 <input type="checkbox"/> Parameter P1 <input type="checkbox"/> Parameter T1 <input type="checkbox"/> Transmit Delay Counter	<input type="checkbox"/> 25 † <input type="checkbox"/> _____ <input type="checkbox"/> 25 † <input type="checkbox"/> _____ <input type="checkbox"/> 64000 † <input type="checkbox"/> _____  <input type="checkbox"/> 6 † <input type="checkbox"/> _____ <input type="checkbox"/> 3 † <input type="checkbox"/> _____ <input type="checkbox"/> 4 † <input type="checkbox"/> _____ <input type="checkbox"/> 64 † <input type="checkbox"/> _____ <input type="checkbox"/> 10 † <input type="checkbox"/> _____ <input type="checkbox"/> 0 † <input type="checkbox"/> _____

## X.25 Configuration Worksheet

- ☐ Accept all defaults

Table 89 (Page 1 of 4). X.25 Configuration Worksheet

<input type="checkbox"/> Add	<input type="checkbox"/> Address  <input type="checkbox"/> htf-address <input type="checkbox"/> protocol	<input type="checkbox"/> Protocol <input type="checkbox"/> Enc Priority 1 <input type="checkbox"/> Enc Priority 2 <input type="checkbox"/> Enc Priority 3 <input type="checkbox"/> CUD Field Usage <input type="checkbox"/> IP Address <input type="checkbox"/> IPX Host Number (in hex) <input type="checkbox"/> X.25 Address <input type="checkbox"/> Protocol <input type="checkbox"/> Current HTF address <input type="checkbox"/> Protocol  <input type="checkbox"/> Window size <input type="checkbox"/> Default Packet Size <input type="checkbox"/> Maximum Packet Size <input type="checkbox"/> Circuit Idle Time <input type="checkbox"/> Maximum Vcs	<input type="checkbox"/> IP † <input type="checkbox"/> IPX <input type="checkbox"/> CC <input type="checkbox"/> SNAP <input type="checkbox"/> NULL <input type="checkbox"/> CC <input type="checkbox"/> SNAP <input type="checkbox"/> NULL <input type="checkbox"/> CC <input type="checkbox"/> SNAP <input type="checkbox"/> NULL <input type="checkbox"/> Standard † <input type="checkbox"/> Proprietary <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> IP † <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> IP † <input type="checkbox"/> XTP <input type="checkbox"/> DECnet <input type="checkbox"/> IPX <input type="checkbox"/> Banyan VINES <input type="checkbox"/> 2 † <input type="checkbox"/> _____ <input type="checkbox"/> 128 † <input type="checkbox"/> _____ <input type="checkbox"/> 128 † <input type="checkbox"/> _____ <input type="checkbox"/> 30 † <input type="checkbox"/> _____ <input type="checkbox"/> 10 † <input type="checkbox"/> _____
<input type="checkbox"/> Add (cont.)	<input type="checkbox"/> pvc	<input type="checkbox"/> Protocol  <input type="checkbox"/> Enc Type <input type="checkbox"/> Packet Channel <input type="checkbox"/> Destination X.25 Address <input type="checkbox"/> Window Size <input type="checkbox"/> Packet Size	<input type="checkbox"/> IP † <input type="checkbox"/> XTP <input type="checkbox"/> DECnet <input type="checkbox"/> IPX <input type="checkbox"/> Banyan VINES <input type="checkbox"/> CC <input type="checkbox"/> SNAP <input type="checkbox"/> NULL <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> 2 † <input type="checkbox"/> _____ <input type="checkbox"/> 128 † <input type="checkbox"/> _____

Table 89 (Page 2 of 4). X.25 Configuration Worksheet

<input type="checkbox"/> Change	<input type="checkbox"/> Address	<input type="checkbox"/> Protocol <input type="checkbox"/> Enc Priority 1 <input type="checkbox"/> Enc Priority 2 <input type="checkbox"/> Enc Priority 3 <input type="checkbox"/> CUD Field Usage <input type="checkbox"/> IP Address <input type="checkbox"/> IPX Host Number (in hex) <input type="checkbox"/> X.25 Address <input type="checkbox"/> Protocol <input type="checkbox"/> Change HTF address <input type="checkbox"/> New HTF address <input type="checkbox"/> Protocol  <input type="checkbox"/> Window size <input type="checkbox"/> Default Packet Size <input type="checkbox"/> Maximum Packet Size <input type="checkbox"/> Circuit Idle Time <input type="checkbox"/> Maximum Vcs <input type="checkbox"/> Protocol  <input type="checkbox"/> Packet Channel <input type="checkbox"/> Destination X.25 Address <input type="checkbox"/> Window Size <input type="checkbox"/> Packet Size	<input type="checkbox"/> IP † <input type="checkbox"/> IPX <input type="checkbox"/> CC <input type="checkbox"/> SNAP <input type="checkbox"/> NULL <input type="checkbox"/> CC <input type="checkbox"/> SNAP <input type="checkbox"/> NULL <input type="checkbox"/> CC <input type="checkbox"/> SNAP <input type="checkbox"/> NULL <input type="checkbox"/> Standard † <input type="checkbox"/> Proprietary <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> IP † <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> IP † <input type="checkbox"/> XTP <input type="checkbox"/> DECnet <input type="checkbox"/> IPX <input type="checkbox"/> * <input type="checkbox"/> Banyan VINES <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> IP † <input type="checkbox"/> XTP <input type="checkbox"/> DECnet <input type="checkbox"/> IPX <input type="checkbox"/> Banyan VINES <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
	<input type="checkbox"/> htf-address <input type="checkbox"/> protocol		
	<input type="checkbox"/> pvc		





Table 89 (Page 4 of 4). X.25 Configuration Worksheet

<input type="checkbox"/> National Restore	<input type="checkbox"/> all <input type="checkbox"/> accept-reverse-charges <input type="checkbox"/> call-req <input type="checkbox"/> ccitt <input type="checkbox"/> clear-req <input type="checkbox"/> disconnect-procedure... <input type="checkbox"/> dp-timer <input type="checkbox"/> flow-control-negotiation <input type="checkbox"/> frame-ext-seq-mode <input type="checkbox"/> frame-window-size <input type="checkbox"/> network-type <input type="checkbox"/> n2-timeouts <input type="checkbox"/> osi-84 <input type="checkbox"/> osi-88 <input type="checkbox"/> *packet-size... <input type="checkbox"/> packet-ext-seq-mode <input type="checkbox"/> request-reverse-charges <input type="checkbox"/> reset <input type="checkbox"/> restart <input type="checkbox"/> standard-version <input type="checkbox"/> suppress-calling-addresses <input type="checkbox"/> throughput-class-negotiation <input type="checkbox"/> *t1-timer <input type="checkbox"/> t2-timer		
<input type="checkbox"/> National Set	<input type="checkbox"/> call-req <input type="checkbox"/> clear-req <input type="checkbox"/> disconnect-procedure <input type="checkbox"/> dp-timer <input type="checkbox"/> frame-window-size <input type="checkbox"/> network-type <input type="checkbox"/> n2-timeouts <input type="checkbox"/> packet-size <input type="checkbox"/> reset <input type="checkbox"/> restart <input type="checkbox"/> standard-version <input type="checkbox"/> t1-timer <input type="checkbox"/> t2-timer		
<input type="checkbox"/> Set	<input type="checkbox"/> address <input type="checkbox"/> cable <input type="checkbox"/> calls-out <input type="checkbox"/> clocking <input type="checkbox"/> default-window-size <input type="checkbox"/> encoding <input type="checkbox"/> equipment-type <input type="checkbox"/> htf addr <input type="checkbox"/> inter-frame-delay <input type="checkbox"/> mtu <input type="checkbox"/> national-personality <input type="checkbox"/> pvc <input type="checkbox"/> speed <input type="checkbox"/> svc <input type="checkbox"/> throughput-class <input type="checkbox"/> vc-idle		

## SDLC Configuration Worksheet

☐ Accept all defaults

Table 90. SDLC Configuration Worksheet

<input type="checkbox"/> Add	<input type="checkbox"/> Station	<input type="checkbox"/> Enter station address <input type="checkbox"/> Enter station name <input type="checkbox"/> Include station in group poll list <input type="checkbox"/> Enter max packet size <input type="checkbox"/> Enter receive window <input type="checkbox"/> Enter transmit window	<input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> Yes † <input type="checkbox"/> No <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
<input type="checkbox"/> Delete	<input type="checkbox"/> Station	<input type="checkbox"/> Name or address	<input type="checkbox"/> _____
<input type="checkbox"/> Disable	<input type="checkbox"/> Link <input type="checkbox"/> Station	<input type="checkbox"/> Name or address	<input type="checkbox"/> _____
<input type="checkbox"/> Enable	<input type="checkbox"/> Link <input type="checkbox"/> Station	<input type="checkbox"/> Name or address	<input type="checkbox"/> _____
<input type="checkbox"/> Set	<input type="checkbox"/> link cable <input type="checkbox"/> link clocking <input type="checkbox"/> link duplex <input type="checkbox"/> link encoding <input type="checkbox"/> link frame-size <input type="checkbox"/> link group poll <input type="checkbox"/> link idle <input type="checkbox"/> link inactivity <input type="checkbox"/> link inter-frame delay <input type="checkbox"/> link modulo <input type="checkbox"/> link name <input type="checkbox"/> link poll <input type="checkbox"/> link role <input type="checkbox"/> link rts-hold <input type="checkbox"/> link snrm <input type="checkbox"/> link spee <input type="checkbox"/> link type <input type="checkbox"/> link xid/test <input type="checkbox"/> station address		

## ISDN Configuration Worksheet

☐ Accept all defaults

Table 91. ISDN Configuration Worksheet			
<input type="checkbox"/> Add	<input type="checkbox"/> accounting-entry	<input type="checkbox"/> _____	
<input type="checkbox"/> Disable	<input type="checkbox"/> PS1		
<input type="checkbox"/> Enable	<input type="checkbox"/> PS1		
<input type="checkbox"/> Remove	<input type="checkbox"/> accounting-entry	<input type="checkbox"/> _____	
<input type="checkbox"/> Set	<input type="checkbox"/> e1-identifier <input type="checkbox"/> frame-size <input type="checkbox"/> local-address-name <input type="checkbox"/> multipoint-selection <input type="checkbox"/> retries-call-address <input type="checkbox"/> service-profile-id  <input type="checkbox"/> timeout-call-address <input type="checkbox"/> switch-variant  <input type="checkbox"/> dn0 <input type="checkbox"/> dn1 <input type="checkbox"/> t1 <input type="checkbox"/> tei	<input type="checkbox"/> _____ <input type="checkbox"/> 1024 † <input type="checkbox"/> 2048 <input type="checkbox"/> 4096 <input type="checkbox"/> _____ <input type="checkbox"/> pp † <input type="checkbox"/> mp <input type="checkbox"/> 2 † <input type="checkbox"/> _____ <input type="checkbox"/> Enter B-channel Number <input type="checkbox"/> Enter Service Profile ID <input type="checkbox"/> 0 † <input type="checkbox"/> _____ <input type="checkbox"/> net3 <input type="checkbox"/> ins64 <input type="checkbox"/> vn3 <input type="checkbox"/> 5ess <input type="checkbox"/> dms100 <input type="checkbox"/> usni1 <input type="checkbox"/> usni2 <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> Auto † <input type="checkbox"/> None <input type="checkbox"/> _____	<input type="checkbox"/> 1 † <input type="checkbox"/> _____ <input type="checkbox"/> 123 † <input type="checkbox"/> _____



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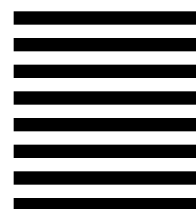
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