

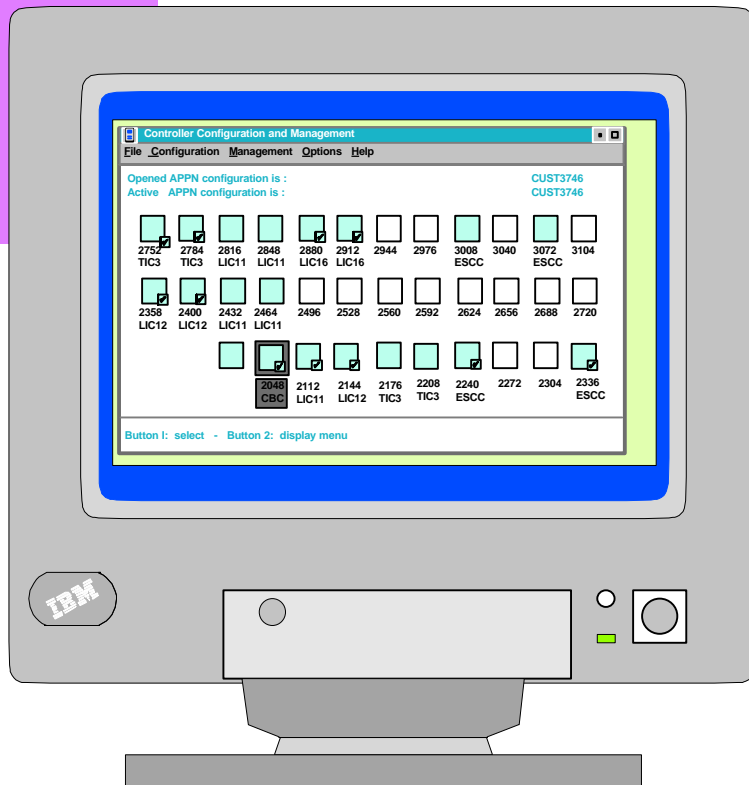
IBM 3746 Nways Multiprotocol Controllers Models 900 and 950

February 12, 1998
(Revision 5)



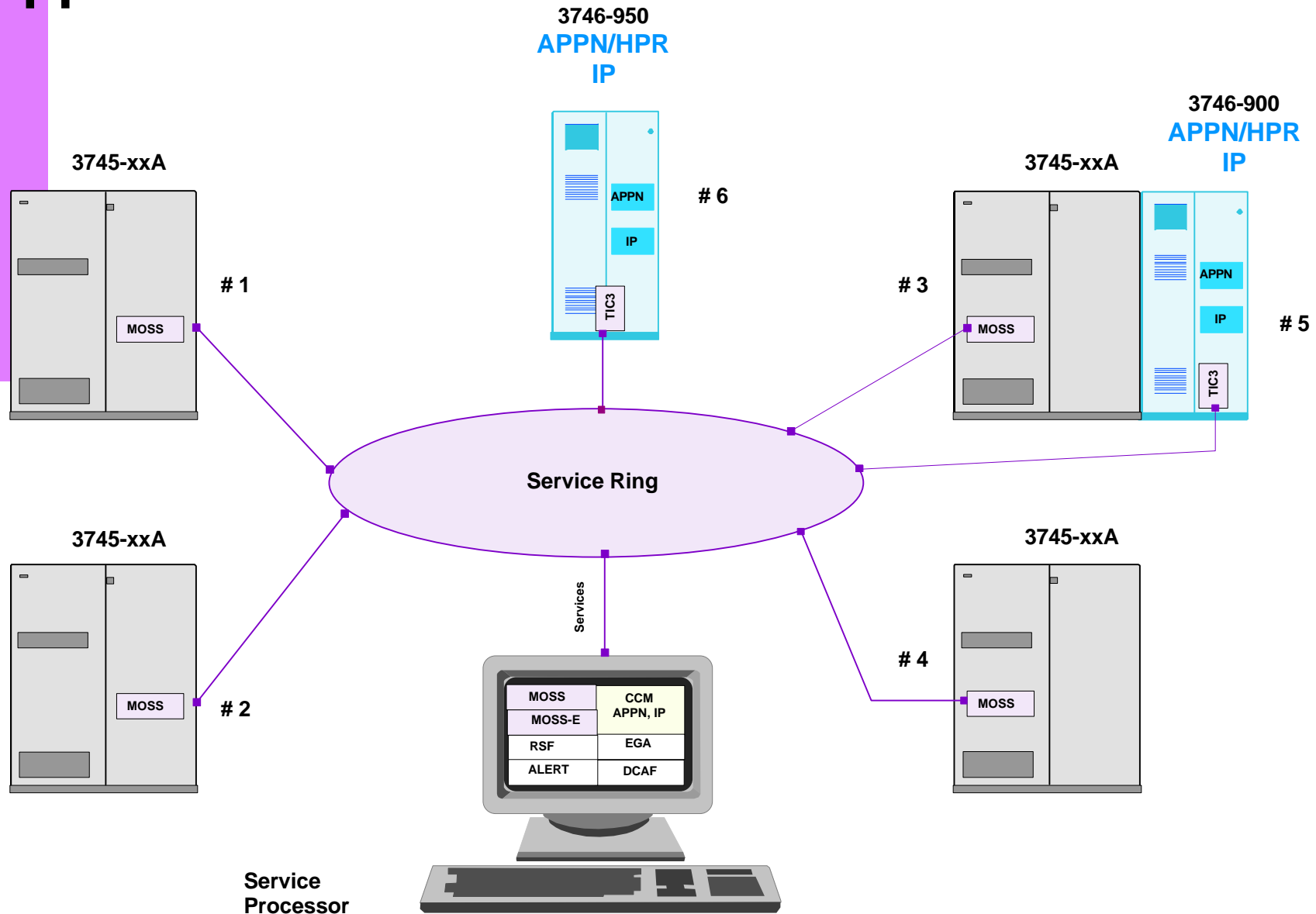
Controller Configuration and Management

Controller Configuration and Management



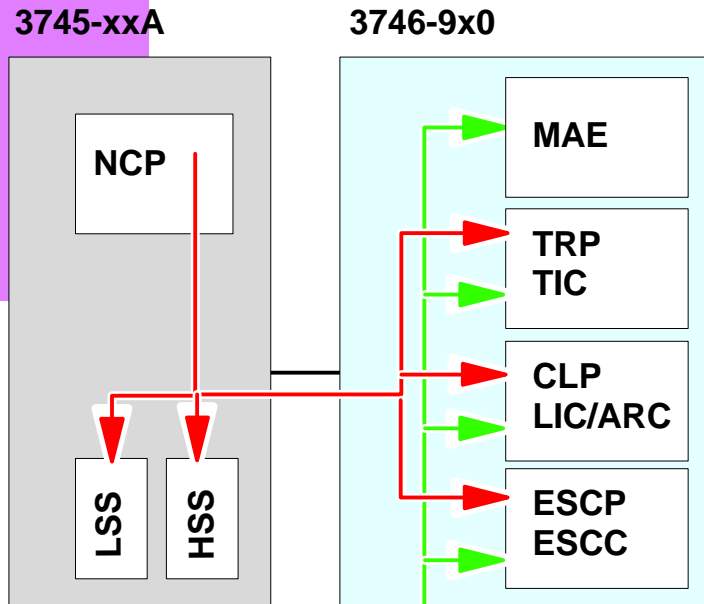
- **Single 3746 management tool**
 - APPN / HPR / IP
 - Display, line/station/session operations
- **Single configurator tool**
 - Support of APPN/HPR
 - Support of Native IP (RIP, OSPF, ARP, ... DLCs)
 - Support of Frame Relay (FRTE, FRSE, BAN, BNN)
 - Support of SNMP, NPM
 - ESCON (SNA (NCP), APPN/HPR, IP)
 - Support of MAE
- **On-line configuration changes**
 - ESCON, LAN, WAN resources
 - Automatic deactivation/reactivation of impacted resources
- **Miscellaneous**
 - Copy function on configuration
 - SPAN of control of CCM operators
 - Search function enhanced

IBM 3745/3746 - Service Processor Applications



CCM - Functions

SNA
VTAM
NCP GEN



CCM
SNA/APPN/HPR
IP

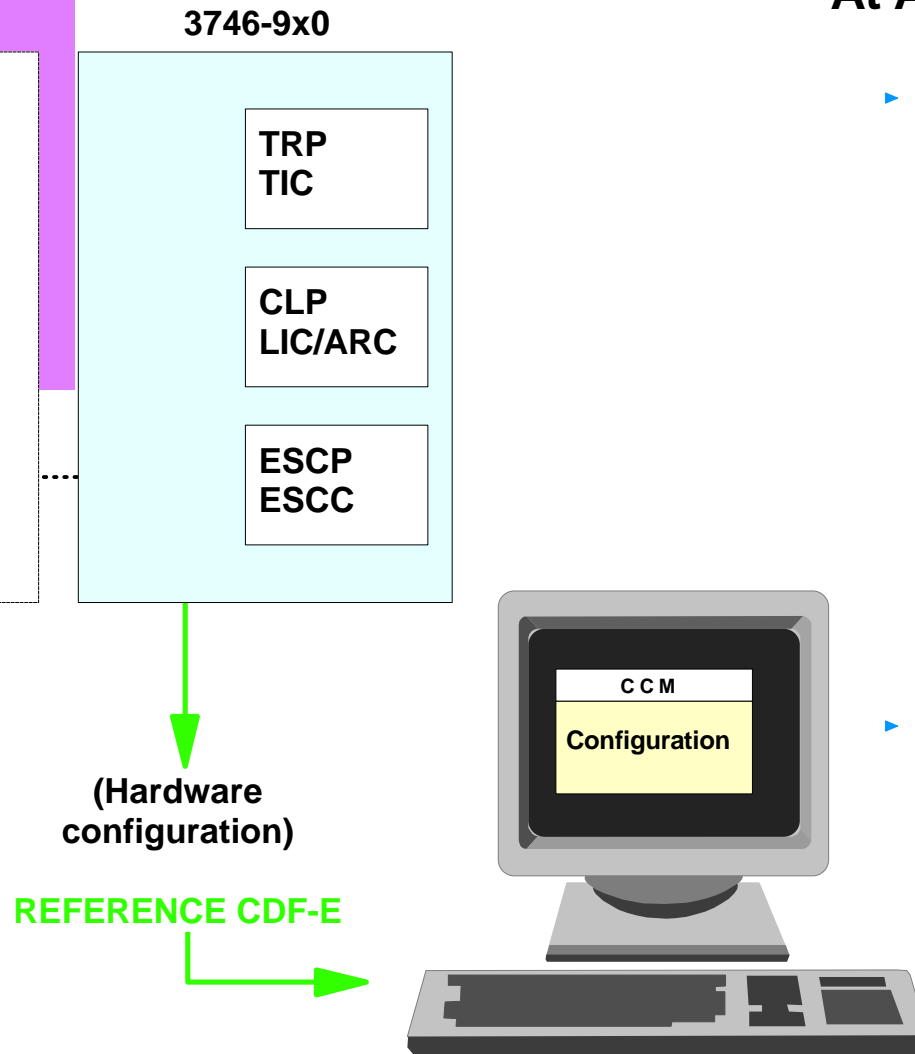
For SNA/APPN/HPR, IP traffic, CCM allows :

- ▶ **Configuring Adapters (ESCP, TRP, CLP) on 3746-900 and 3746-950 for SNA/Sub-Area (ESCP), APPN/HPR, IP)**
 - **Creation**
 - **Modification (on line modification)**
 - **Deletion**

- ▶ **Configuring MAE adapters (ATM, ESCON, ISDN ...)**

- ▶ **Managing APPN/HPR, IP box resources :**
 - **Activation**
 - **Deactivation**
 - **Dynamic status, EN display**
 - **Displays**

CCM - Configuration



At Adapters level, CCM allows couplers :

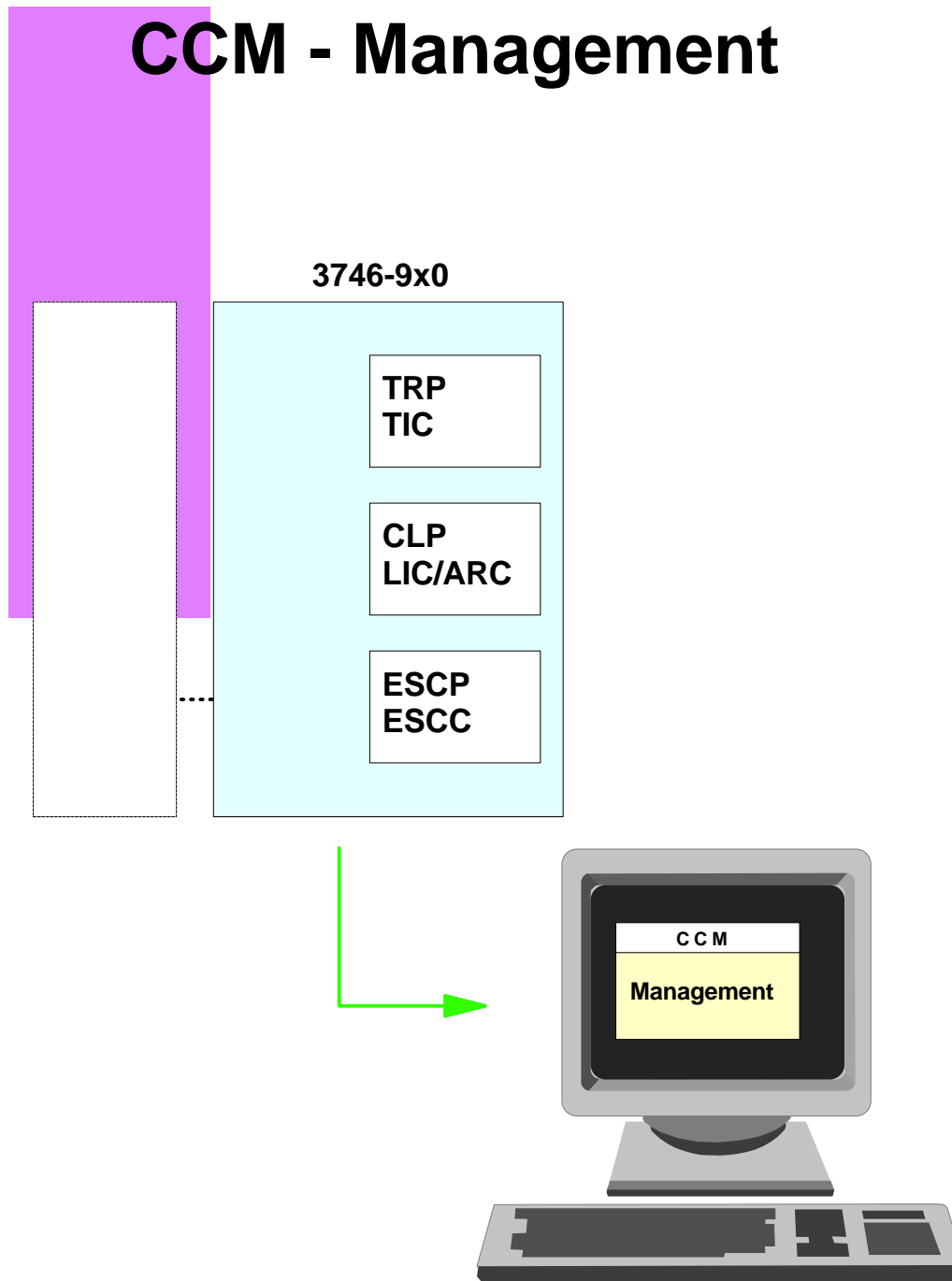
▸ **Parameters setting (80 % default value)**

- General Network Node APPN
- General IP
- Common to all DLCs
- Specific ESCON
- Common FR/SDLC/X25
- Specific FR
- Specific SDLC
- Specify X25
- Specific TR

▸ **Configuring from**

- Service Processor
- Stand-Alone PS/2

CCM - Management



At Network Node level, it allows :

- ▶ **Activating / deactivating**
 - Network Node
 - Port
 - Station
- ▶ **Displaying status resources on**
 - Port
 - EN, LEN, DLU attached to NN

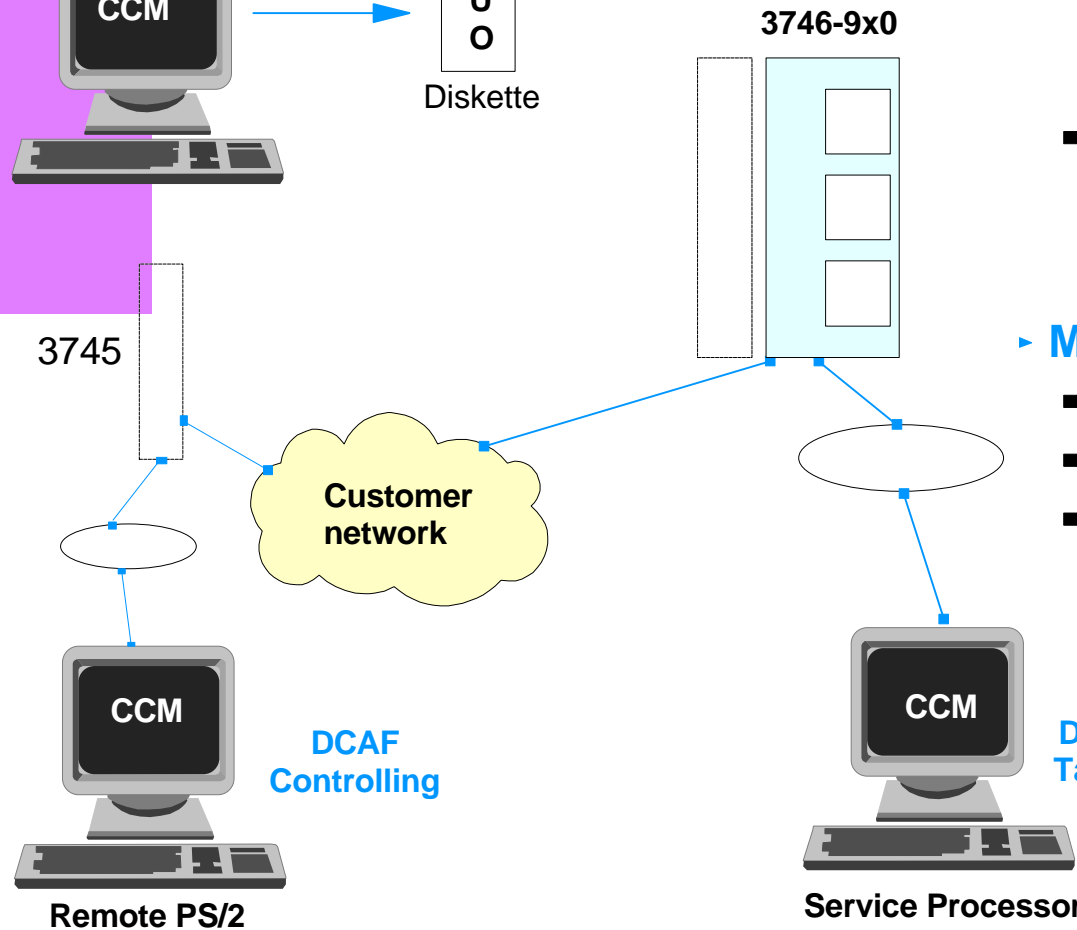
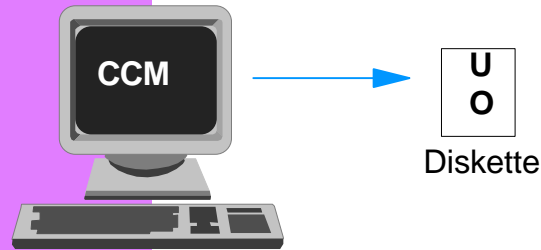
At Adapter level, it allows :

- ▶ **Activating / deactivating**
 - Port
 - Station
- ▶ **Displaying status resources on**
 - Port
 - Station
 - Session

CCM - Operations



Stand-alone PS/2 (configuration)



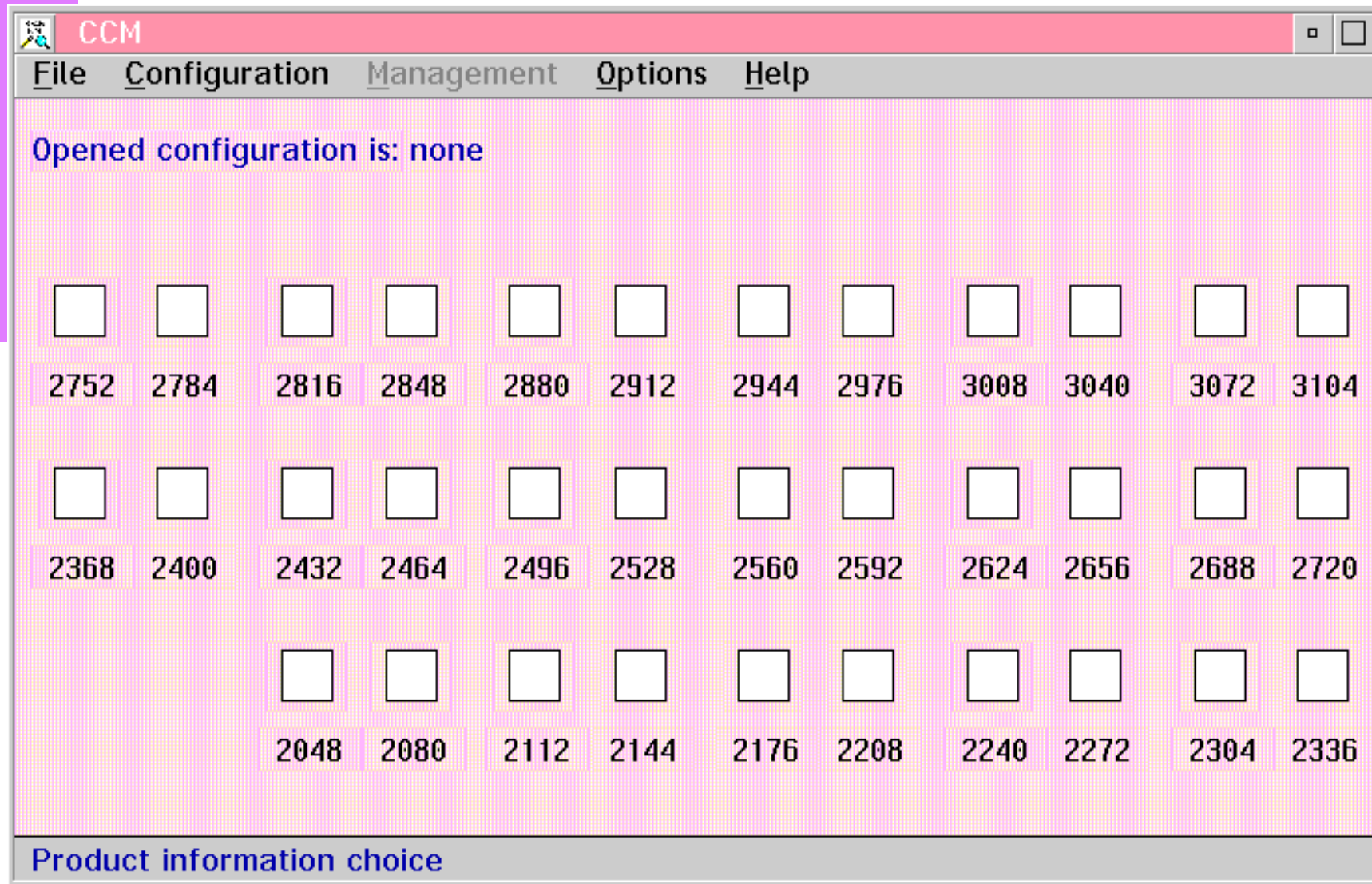
► Configuration :

- From the *Service Processor*
- From a *Stand-alone CCM PS/2* (diskette for transfer of the configuration file)
- From a *Remote PS/2* with DCAF (for updates on the active configuration file)

► Management :

- From the *Service Processor*
- From a *Remote PS/2* with DCAF
- From *NetView/MVS* (Alert, NPM, APPNTAM)

CCM - Main Menu



CCM - Import Configuration



Import a Configuration

Name	Date	Time	CCM version
- Config_01	Oct-23-1995	19:24	V1
- Config_02	Oct-23-1995	19:52	V1
- ERS4ST	Dec-19-1995	16:05	V2

Import selected configuration Cancel Help

CCM - Open Configuration



Opened configuration is: ERS4ST (Dec-19-1995)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2752	2784	2816	2848	2880	2912	2944	2976	3008	3040	3072	3104
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2368	2400	2432	2464	2496	2528	2560	2592	2624	2656	2688	2720
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	2048	2080	TIC3	2112	2144	2176	2208	2240	2272	2304	2336
			TIC3	TIC3	ESCC			LIC12	LIC12	LIC12	LIC

Coupler 2080

CCM - FILE Functions



The screenshot shows the CCM application window with a menu open. The menu items are: New..., Open..., Save..., Save as..., Close opened configuration, Import a configuration..., and Exit. The main window displays a grid of configuration options with checkboxes and labels.

ST (Dec-19-1995)											
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2880	2912	2944	2976	3008	3040	3072	3104				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2368	2400	2432	2464	2496	2528	2560	2592	2624	2656	2688	2720
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	2048	2080	2112	2144	2176	2208	2240	2272	2304	2336	
		TIC3	TIC3	TIC3	ESCC		LIC12	LIC12	LIC12	LIC	

New configuration choice

CCM - CONFIGURATION Functions



The screenshot shows the CCM configuration window with the following menu items and grid options:

Menu Item	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
Open	(Dec-19-1995)					
Coupler...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NN/FP/DLUR...	2944	2976	3008	3040	3072	3104
Low-entry networking (LEN)...						
Mode/COS...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stations on coupler/port 2080... 3745/3746...	2752					
Frame-relay frame handler set...						
IP →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QSPF →						
RIP →	2368	2560	2592	2624	2656	2688
BGP →						
ARP...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SNMP...	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
V.25 bis directory...	2176	2208	2240	2272	2304	2336
WRS...	ESCC		LIC12	LIC12	LIC12	LIC

Configure selected coupler choice

CCM - MANAGEMENT Functions (APPN)



The screenshot shows the CCM application window with the following components:

- Menu:** File, Configuration, Management, Options, Help. The 'Management' menu is open, showing options like Ports..., Stations..., Non intermediate sessions..., APPN specifics, IP specifics, Activate all resources..., Deactivate all resources (normal mode)..., and Deactivate all resources (forced mode)...
- Grid:** A grid of resource icons. The first row has three icons with labels 2752, 2784, and 2816. The second row has twelve icons with labels 2368, 2400, 2432, 2464, 2496, 2528, 2560, 2592, 2624, 2656, 2688, and 2720. The third row has icons with labels 2048, 2080 (TIC3), 2112 (TIC3), 2144 (TIC3), 2176 (ESCC), 2208, 2240 (LIC12), 2272 (LIC12), 2304 (LIC12), and 2336 (LIC). The 2080 TIC3 icon is highlighted.
- Status Bar:** Display topology choice

CCM - MANAGEMENT Functions (IP)



The screenshot shows the CCM application window with a menu open. The menu items are:

- Ports...
- Stations...
- Non intermediate sessions...
- APPN specifics →
- IP specifics →
- Activate all resources...
- Deactivate all resources (normal mode)...
- Deactivate all resources (forced mode)...

The main window displays a grid of configuration options. The 'IP specifics' menu is open, showing a list of IP addresses and their associated resources. The '2080 TIC3' option is highlighted.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								
2752	2784	2816								
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2368	2400	2432	2464	2496	2528	2560	2592	2624		
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	2048	2080	2112	2144	2176	2208	2240	2272	2304	2336
		TIC3	TIC3	TIC3	ESCC		LIC12	LIC12	LIC12	LIC

Configuration command choice

CCM - OPTIONS Functions (1/3)



CCM

File Configuration Management Options Help

Opened configuration is: ERS4ST

View → APPN/IP NDF...
 Print → IP IDF...
 Save as → ESCON NCP output...
 ESCON IOCP output...
 CCM log file...
 NDF log file...
 IDF log file...

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2752	2784	2816	2848	2880	2912	2944	2976	3008	3040	3072	3104
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2368	2400	2432	2464	2496	2528	2560	2592	2624	2656	2688	2720
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	2048	2080	2112	2144	2176	2208	2240	2272	2304	2336	
		TIC3	TIC3	TIC3	ESCC		LIC12	LIC12	LIC12	LIC	

View APPN/IP NDF output choice

CCM - OPTIONS Functions (2/3)



CCM

File Configuration Management Options Help

Opened configuration is: ERS4ST

View →

Print →

Save as →

CCM log file...

NDF log file...

IDF log file...

APPN/IP NDF

IP IDF

ESCON NCP output

ESCON IOCP output

All

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2752	2784	2816	2848	2880	2912	2944	2976	3008	3040	3072	3104
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2368	2400	2432	2464	2496	2528	2560	2592	2624	2656	2688	2720
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	2048	2080	2112	2144	2176	2208	2240	2272	2304	2336	
		TIC3	TIC3	TIC3	ESCC		LIC12	LIC12	LIC12	LIC	

Print APPN/IP NDF output choice

CCM - OPTIONS Functions (3/3)



CCM

File Configuration Management Options Help

Opened configuration is: ERS4ST

View →
 Print → 9-1995)
 Save as → APPN/IP NDF...
 CCM log file... IP IDF...
 NDF log file... ESCON NCP output...
 IDF log file... ESCON IOCP output...
 All...

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2752	2784	2816	2848	2880	2912	2944	2976	3008	3040	3072	3104
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2368	2400	2432	2464	2496	2528	2560	2592	2624	2656	2688	2720
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		2048	2080 TIC3	2112 TIC3	2144 TIC3	2176 ESCC	2208	2240 LIC12	2272 LIC12	2304 LIC12	2336 LIC

Save as APPN/IP NDF output choice

CCM - HELP Functions



The screenshot shows the CCM application window with the following elements:

- Window Title:** CCM
- Menu Bar:** File, Configuration, Management, Options, Help
- Status Bar:** Help index choice
- Main Content:** A grid of configuration options. The text "Opened configuration is: ERS4ST" is displayed at the top left of the grid.
- Help Menu:** A dropdown menu is open under the "Help" menu, containing the following items:
 - Help index...
 - General help...
 - Using help...
 - Glossary...
 - Send your comments...
 - Product information...

2752	2784	2816	2848	2880	2912	2944	2976	3008	3040	3072	3104
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2368	2400	2432	2464	2496	2528	2560	2592	2624	2656	2688	2720
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		2048	2080 TIC3	2112 TIC3	2144 TIC3	2176 ESCC	2208	2240 LIC12	2272 LIC12	2304 LIC12	2336 LIC

CCM - Network Management (APPN/HPR)



Network Node/Focal Point/Dependent LU Requester Parameters

Network Node and Focal Point Parameters

Network Node (NN):	SYSTSTAP	Network identifier	ERS4	Control point name
Comments (optional):				
Network management Focal Point:	SYSTSTAP	Network identifier	CNM12	Control point name
HPR support:	No HPR Support			

NN characteristics... Backup focal point... RTP parameters...

Dependent LU Requester (DLUR) Parameters

Primary dependent LU server (DLUS):	SYSTSTAP	Network identifier	ICN01	Control point name
Backup DLUS?	<input type="radio"/> Yes <input checked="" type="radio"/> No			
Waiting time before short retry:	10	seconds	[(-1)-120]	
Waiting time before long retry:	30	seconds	[30-1200]	

OK Cancel Help

CCM - Network Management (IP)



SNMP Configuration

Configure a Set of SNMP Transport Information

Access type: Read Trapdest

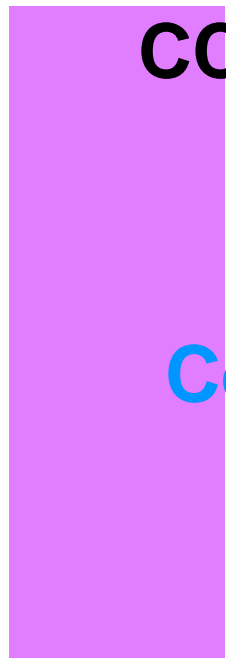
Community name:

UDP transport: Network IP address Network mask

SNMP Transport Information Sets Already Configured

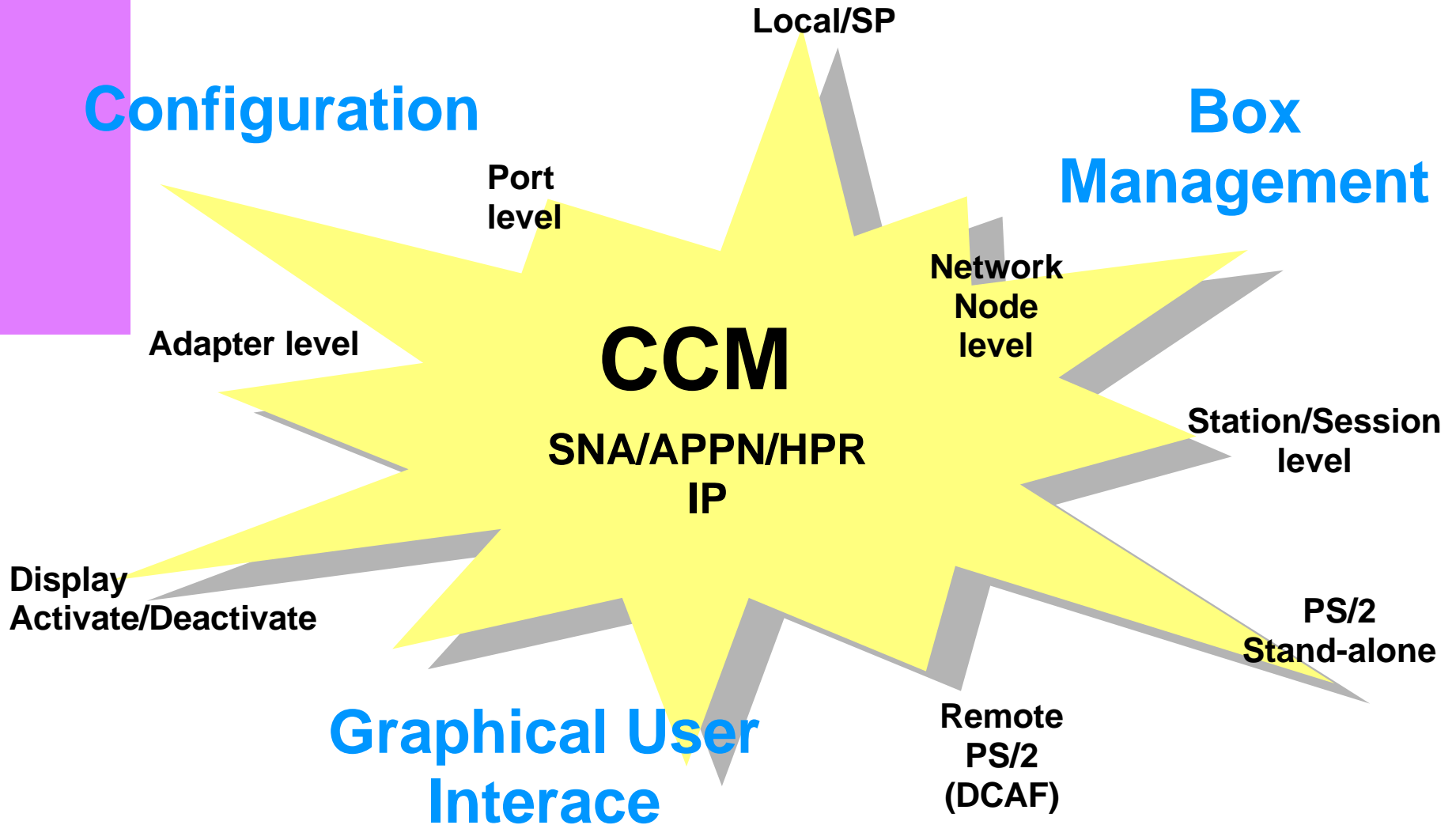
Access	Community name	Network IP address	Network mask

CCM - Summary



Configuration

Box Management



IBM 3746 - CCM

