

Customer Questionnaire for Native Deployment

Ericsson Dynamic Activation 1

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1 General

This document contains questions about site and customer specific parameters needed to configure the Ericsson Dynamic Activation (EDA) system and its components on GEP3 or GEP5 blades. This document also contains questions regarding the site status which will be the foundation for a decision when the actual implementation will begin.

The parameter values must be filled in by customer.

This document may be used by installation personnel or customers that want a complete description of the Dynamic Activation parameters and its components that are site and customer specific.

1.1 Introduction

This document lists the parameters which have no proposed default value at the installation or will have a different value than the proposed default value.

The parameters in this document can be of three types:

1. P - Predefined, not possible to change.
2. C - Customer configured after discussions with Ericsson.
3. S - Site specific parameters.

1.2 Survey

In order to improve the product quality, you are welcome to participate in the Dynamic Activation upgrade survey program. After upgrading, please take the link below to the survey page:

<https://ericoll.internal.ericsson.com/sites/SDPsurvey/Lists/EDA%20InstallationUpgrade%20Survey/>

If you encounter any problem, please contact Tier 2 support for assistance.

2 Field Related

In this chapter site related questions will be asked which are necessary for the installer to perform the actual installation.

2.1 Site Unique Number

The IPB Number uniquely represents an installation at the site. The IPB Number is only known by the customer if an upgrade is to be performed.

If it is a new system an IPB Number will be appointed to the site.

Table 1: Site Unique Number

Parameter	Description	Value	Type
<IPB Number>	The IPB number will be of format IPB 12345678.		S
<Dynamic Activation version>	If an upgrade is to be performed.		S

2.2 Ericsson Contact Information

In this chapter an Ericsson contact person if applicable must be stated. Please state name of person, which role will have during implementation, e-mail address and phone number.

Each contact person must be notified about the implementation of Dynamic Activation and be available during the weeks of implementation activity.

Table 2: Ericsson Contact

Name	Role	E-Mail	Phone

Note : At least one of the persons stated in *Table 2* must be the person who will sign of the Acceptance Test report. Highlight this person in the above contact list.

Table 3: Ericsson Office Address

Street
City
Phone

2.3 Customer Information

2.3.1 General Information

Table 4: General Information

Operator Name	
Country	
Address	
Main Contact	
E-mail	
Phone Number	

2.3.2 Planning

Table 5: Planning Information

Target Launch Date	
Number of Subscribers	
Address	
Main Contact	
E-mail	
Phone Number	

2.3.3 Contact Information

The project manager at the operator must be stated (If applicable).

Table 6: Project Manager Information

Name	
Telephone	
Mobile	
E-mail	

2.3.4 Site Location

Table 7: Location Information

Location	
Address	
Site Access Information	

2.4 Check List

In this chapter questions will be asked related to site status. Please answer YES or NO. If NO, then state the expected date when it will be ready.

Table 8: Check List

Question	Answer ¹	Date
Has the HW arrived to the site?		
Has the HW been unpacked at site?		
Has the HW been checked towards Hardware Specification, see ref [2] in References .		
Is a LAN connection available for Dynamic Activation?		
Are all available NEs that are to be connected to Dynamic Activation configured to handle Dynamic Activation connection?		
Are all NEs reachable through IP network connection from where Dynamic Activation is to be placed?		
Are there test numbers available for each NE to be used in acceptance testing of Dynamic Activation?		
Is the number of power outlets sufficient according to Hardware Specification, see ref [2] in References		
Are all personnel listed in the chapter "Customer Contacts" chapter notified and available during the period of integration of Dynamic Activation?		

¹ If any of the questions are answered with no, please make a note of the reason.

3 Installation of Dynamic Activation

This chapter covers information that needs to be answered for Dynamic Activation configuration.

Table 9: Site Information

Parameter	Description
Cabling	Fill in the values in chapter 8.1.1 Cabling.
Miscellaneous	Fill in the values in chapter 8.1.2 Miscellaneous.

Table 10: Integration Information

Parameter	Description
IP Network Configuration	Fill in the values in chapter 9.2.2 IP Network Configuration.
Open Ports	Fill in the values in chapter 8.2.3. Open Ports.
IP Address Information	Fill in the values in chapter 8.2.1 IP Address External Connections.
System Backup Information	Fill in the values in chapter 8.1.3 System Backup Information.
Licensing	Fill in the values in chapter 8.1.4 Licensing.
SNMP Parameters	Fill in the values in chapter 8.2.2 SNMP Parameters.
Geographically Redundant Clusters	Fill in the values in chapter 8.3 Geographically Redundant Clusters.

4 Core Network

In this chapter you need to make a network plan of which NEs are to be connected to Dynamic Activation. For a list of supported NEs in Dynamic Activation, see Function Specification Subscriber Activation [ref \[1\] in References](#).

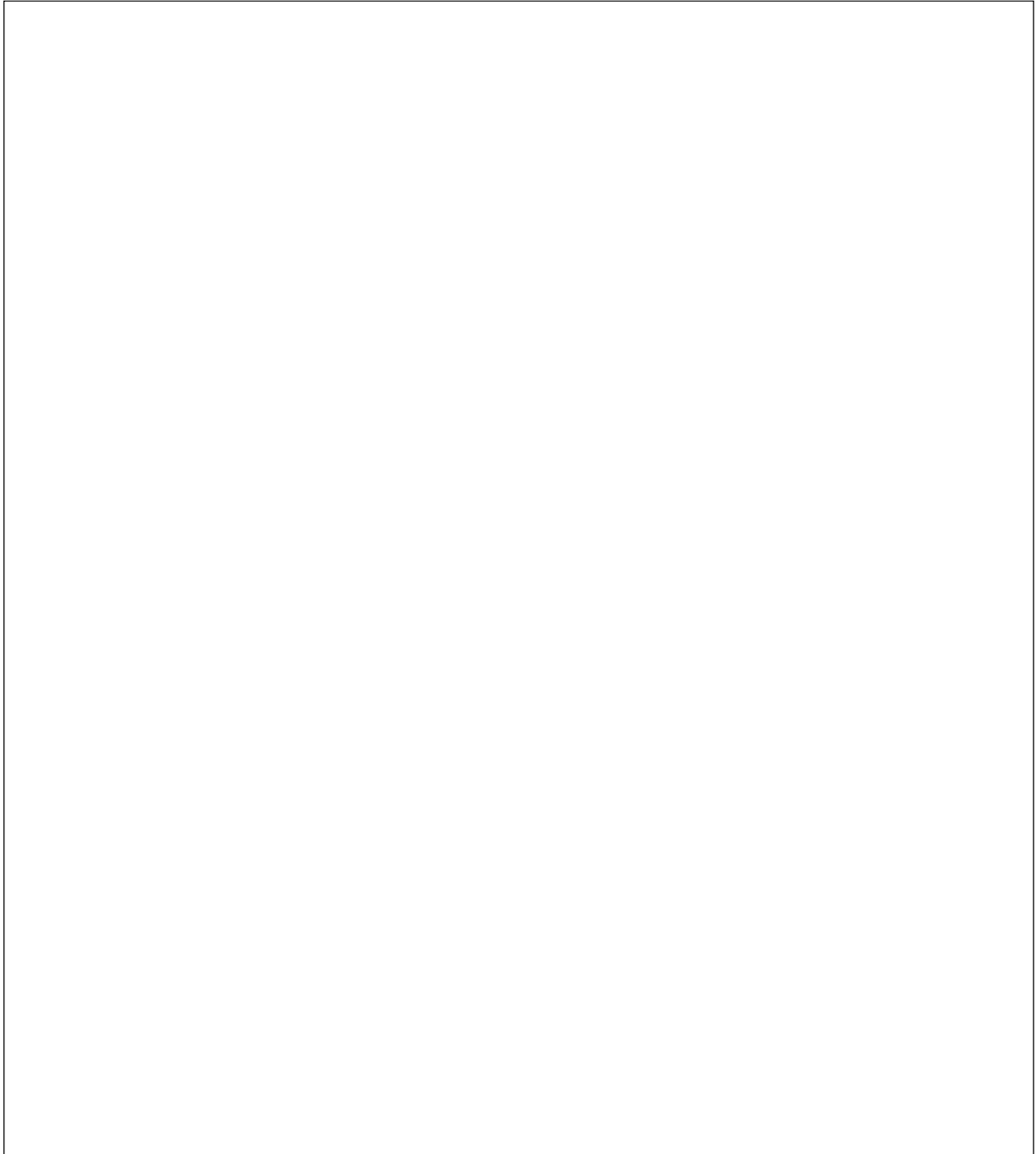
Please specify what NE type the network plan represent, which protocol is to be used and also if there are some customer adaptations.

In Function Specification Subscriber Activation, see [ref \[1\] in References](#), all represented protocols available in Dynamic Activation are listed. As each NE will have some type of communication (a protocol) this needs also to be filled in.

Please make as many copies as needed of each Appendix so it represents one NE.

Dynamic Activation modulated architecture provides flexibility in composing a customer specific deployment instance that solves a specific need. To ease roll-out of such a composition, a variety of deployment scenarios are supported, as shown in the figure below.

Dynamic Activation on Ericsson Blade System or Blade System Platform is by default in high availability configuration with minimum configuration of four servers.

Customer Network Plan of Dynamic Activation -> Core Network Configuration

5 Network Element Table

Fill in function type and version of the network element in table below. For information of supported network elements, see Function Specification Subscriber Activation, [ref \[1\] in References](#).

Table 11: Network Element Table

NE	Name	Version	Protocol	User/Password	Other

7 Other Important Information

Make a note of other information that can be valuable during installation/configuration of Dynamic Activation.

8 APPENDIX A: Common Parameters

This chapter contains common parameters applicable for a Dynamic Activation system with eVIP solution.

8.1 Site Information

This section covers common information relating to the physical connections and installation of Dynamic Activation.

8.1.1 Cabling

Table 13: Cabling Information

Cabling in Place? (Yes/No)	
Ground Cabling Installed? (Yes/No)	

8.1.2 Miscellaneous

Table 14: Time Zone Information

Time Zone	
What time zone should be configured?	<TIMEZONE>

8.1.3 System Backup Information

Table 15: System Backup Information

System Backup Information	
Frequency of System Backups (cron spec)	

8.1.4 Licensing

Table 16: Licensing

Licensing	
Is a license key ordered for the Dynamic Activation feature? (Yes/No)	
Notification E-mail From Address	

Notification E-mail To Address (several may be specified)	
SMTP Server Host Address	
SMTP Server Port Number	
Use SMTP Authentication (Yes/No)	
SMTP User Name	
SMTP Password	

8.2 Integration Information

8.2.1 IP Address External Connections

Table 17: Primary CUDB over LDAP Connection

CUDB Server Address	
CUDB Server Port	
User Name	
User Password	

Table 18: Secondary CUDB over LDAP Connection

CUDB Server Address	
CUDB Server Port	
User Name	
User Password	

Table 19: Tertiary CUDB over LDAP Connection

CUDB Server Address	
CUDB Server Port	
User Name	
User Password	

Table 20: HLR-FE #1 over TELNET Connection

HLR-FE Address	
HLR-FE Port	
User Name	
User Password	

Table 21: HLR-FE #2 over TELNET Connection

HLR-FE Address	
HLR-FE Port	
User Name	
User Password	

Note: There might be more HLR-FEs. Address, Port, User Name and Password must be entered for all HLR-FEs.

Table 22: AUC-FE #1 over TELNET Connection

AUC-FE Address	
AUC-FE Port	
User Name	
User Password	

Table 23: AUC-FE #2 over TELNET Connection

AUC-FE Address	
AUC-FE Port	
User Name	
User Password	

Note: There might be more AUC-FEs. Address, Port, User Name and Password must be entered for all AUC-FEs.

Table 24: HSS-FE #1 over SOAP Connection

HSS-FE Address	
HSS-FE Port	
User Name	
User Password	

Table 25: HSS-FE #2 over SOAP Connection

HSS-FE Address	
HSS-FE Port	
User Name	
User Password	

Note: There might be more HSS-FEs. Address, Port, User Name and Password must be entered for all HSS-FEs.

8.2.2 SNMP Parameters

This table should be completed if an SNMP Network Manager is available and should be connected to the Dynamic Activation system.

Table 26: SNMP Parameters

Community	
Write Community	
Trap Destination Host IP	
Trap Port	
Trap Version	

Note: The SNMP IP address is used by snmp utilities like snmpwalk to examine the system.
The Trap Destination Host IP is the IP address of the server that receives SNMP traps from the Dynamic Activation system.

8.2.3 Open Ports

For a list of external ports that need to be open in the firewall, see System Administrators Guide for Native Deployment, [ref \[4\] in References](#).

8.3 Geographically Redundant Clusters

This table should be completed if one or two other clusters are available and need to be connected to this Dynamic Activation cluster for synchronization purposes.

Table 27: Parameters for Geographical Redundance

VIP-OAM-IP of cluster #1	
VIP-OAM-IP of cluster #2	

9 APPENDIX B: Specific Parameters - with eVIP

This chapter contains specific parameters applicable for a Dynamic Activation system with eVIP solution.

9.1 Site Information

For information see chapter [8.1 Site Information](#).

9.2 Integration Information

9.2.1 IP Network Configuration

It is important that the external VLAN IDs mentioned in this section are not the same as the internal VLAN IDs. The following table shows the internal VLAN IDs:

Table 28: Internal VLAN IDs

Description	VLAN ID
PG_PROV_SP1	104
PG_OM_SP2	204
PG_OM_SP1	184
BSP_NBI	4054
PG_BOOT_PDL	4004
PG_BOOT_PDR	4014
PG_LDE_SP	4024
PG_NTPL	54
PG_NTPR	64

To configure the network, the following need to be decided:

- Whether to use VRRP or BFD for link failure detection
- Whether to use one or two physical uplinks from each CMX

The following table shows what subnets that need to be allocated:

Table 29: Subnets

Type	Subnet Name	Subnet	Netmask
VRRP	PROV_OM_CN	____.____.____.____	/29
	OM_CN_SP	____.____.____.____	/29
BFD	PROV_OM_CN	____.____.____.____	/29
	OM_CN_SP	____.____.____.____	/29

VRRP/BFD	OM_CN_SP2	____.____.____.____	/29
	VIP-TRAFFIC-IP	____.____.____.____	/32
	VIP-OAM-IP	____.____.____.____	/32
	BSP_NBI	____.____.____.____	/29

The following table needs to be filled in with correct Uplink port type, for Uplink OAM E7 or GE4, and for Uplink traffic E7 or GE2.

Table 30: Uplink Interfaces

Port Type	Configuration Tag	Comments
_____	<E7 GE2>	Uplink Traffic, E7 or GE2 port type
_____	<E7 GE4>	Uplink OAM, E7 or GE4 port type

The tables below contain the following information, and the tables need to be addressed before the actual installation:

- Needed IP addresses that should be allocated by the customer network.
- The uplink VLANs that has to be extended to the connected router in the customer network.
- IP addresses of services that the system depends on for DNS, NTP.

Table 31: IP Network Configuration for VRRP

IP address/ VLAN ID/Name	Mask	Configuration Tag	Comments
VRRP Traffic VLAN: "PROV_OM_CN"			
____.____.____.____	/29	Network	The network that holds the provisioning traffic to and from the customer equipment.
____.____.____.____		<PROV_OM_CN_VRRP_GW_IP>	VRRP address used as gateway for provisioning traffic towards Network Elements.
____.____.____.____		<PROV_OM_CN_VRRP_IP>	VRRP address used as gateway for customer network for provisioning traffic towards PG system.
____.____.____.____		<PROV_OM_CN_CMX_0_26_IP>	Uplink traffic address for E7/GE2 port on CMX-0-26.
____.____.____.____		<PROV_OM_CN_CMX_0_28_IP>	Uplink traffic address for E7/GE2 port on CMX-0-28.
____.____.____.____		<PROV_OM_CN_VID> ¹	VLAN ID for UPLINK-TRF to be defined both in internal network and customer network router.
____.____.____.____		<PROV_OM_CN_VRRP_VRID>	Virtual Router Identifier Must not be the same as the VRRP-VRID in customer equipment.
VRRP OAM VLAN: "OM_CN_SP"			
____.____.____.____	/29	Network	The network that holds the OAM traffic to and from the CMX-0-26.
____.____.____.____		<OM_CN_SP_VRRP_GW_IP>	VRRP address used as gateway for OAM Traffic.
____.____.____.____		<OM_CN_SP_VRRP_IP>	VRRP address used as Gateway for customer network for OAM traffic towards PG system
____.____.____.____		<OM_CN_SP_CMX_0_26_IP>	Uplink OAM address for E7/GE4 port on CMX-0-26.
____.____.____.____		<OM_CN_SP_CMX_0_28_IP>	Uplink OAM address for E7/GE4 port on CMX-0-28.
____.____.____.____		<OM_CN_SP_VID> ¹	VLAN ID for OM_CN_SP to be defined both in internal network and customer network router.
____.____.____.____		<OM_CN_SP_VRRP_VRID>	Virtual Router Identifier Must not be the same as the VRRP-VRID in customer equipment.

¹) It is important that the external VLAN IDs are not the same as the internal VLAN IDs described in table 27 page 19.

Table 32: IP Network Configuration for BFD

IP address/ VLAN ID/Name	Mask	Configuration Tag	Comments
BFD Traffic VLAN: "PROV_OM_CN"			
____.____.____.____	/29	Network	The network that holds the provisioning traffic to and from the CMX-0-26.
____.____.____.____		<PROV_OM_CN_CMX_0_26_CE0_GW_IP>	Default gateway used for outgoing provisioning traffic towards Network Elements
____.____.____.____		<PROV_OM_CN_CMX_0_26_IP>	Gateway for customer network for traffic towards PG on CMX-0-26. Cable is connected to CMX-0-26 port E7/GE2.
____		<PROV_OM_CN_VID>	VLAN ID for PROV_OM_CN_CMX_0_26 to be defined both in internal network and customer network router.
BFD Traffic VLAN: "PROV_OM_CN"			
____.____.____.____	/29	Network	The network that holds the provisioning traffic to and from the CMX-0-28.
____.____.____.____		<PROV_OM_CN_CMX_0_28_CE1_GW_IP>	Default Gateway used for outgoing provisioning traffic towards Network Elements
____.____.____.____		<PROV_OM_CN_CMX_0_28_IP>	Gateway for customer network for traffic towards PG on CMX-0-28. Cable is connected to CMX-0-28 port E7/GE2.
____		<PROV_OM_CN_VID>	VLAN ID for PROV_OM_CN_CMX_0_28 to be defined both in internal network and customer network router.
BFD OAM VLAN: "OM_CN_SP"			
____.____.____.____	/29	Network	The network that holds the OAM traffic to and from the CMX-0-26.
____.____.____.____		<OM_CN_SP_CMX_0_26_CE0_GW_IP>	Default gateway used as gateway for OAM Traffic.
____.____.____.____		<OM_CN_SP_CMX_0_26_IP>	Gateway for customer network for OAM towards PG on CMX-0-26. Cable is connected to CMX-0-26 port E7/GE4.
____		<OM_CN_SP_VID>	VLAN ID for OM_CN_SP_CMX_0_26 to be defined both in

			internal network and customer network router.
BFD OAM VLAN: "OM_CN_SP"			
____.____.____.____	/29	Network	The network that holds the OAM traffic to and from the CMX-0-28.
.____		<OM_CN_SP_CMX_0_28_CE1_GW-IP>	Default gateway used as gateway for OAM Traffic.
.____		<OM_CN_SP_CMX_0_28_IP>	Gateway for customer network for OAM towards PG on CMX-0-28. Cable is connected to CMX-0-28 port E7/GE4.
____		<OM_CN_SP_VID>	VLAN ID for OM_CN_SP_CMX_0_28 to be defined both in internal network and customer network router.

Table 33: IP Network Configuration for VRRP and BFD

IP address/ VLAN ID/Name	Mask	Configuration Tag	Comments
SYSOAM VLAN: "PG_OM_SP1"			
____.____.____.____	/29	<PG_OM_SP1_NW>	The SYSOAM network that handles OAM traffic such as SSH and SNMP.
.____		<PG_OM_SP1_VRRP_IP>	VRRP address for outgoing OAM traffic such as SSH and SNMP.
.____		<PG_OM_SP1_CMX_0_26_IP>	IP-address CMX-0-26
.____		<PG_OM_SP1_CMX_0_28_IP>	IP-address CMX-0-28
.____		<PG_OM_SP1_SC_1_IP>	External address SC-1
.____		<PG_OM_SP1_SC_2_IP>	External address SC-2
Collapsed northbound: "BSP_NBI"			
____.____.____.____	/29	<BSP_NBI_NW>	Network for collapsed northbound, DMXC access.
.____		<BSP_NBI_VRRP_IP>	VRRP address for outgoing DMXC management traffic.
.____		<BSP_NBI_IP>	External collapsed northbound DMXC IP.
.____		<BSP_NBI_CMX_0_26_IP>	IP-address CMX-0-26 in VLAN BSP_NBI
.____		<BSP_NBI_CMX_0_28_IP>	IP-address CMX-0-28 in VLAN BSP_NBI
____.____.____.____	/32	<VIP-TRAFFIC-IP>	VIP-TRAFFIC is reachable from the

			customer network via PROV_OM_CN_VRRP_P_IP in the VRRP solution and via PROV_OM_CN_CMX_0_26_IP and PROV_OM_CN_CMX_0_28_IP in the BFD solution. Set up routes in the customer network for this.
____.____.____.____	/32	<VIP-OAM-IP>	VIP-OAM-IP is reachable from the customer network via OM_CN_SP_VRRP_IP in the VRRP solution and via OM_CN_SP_CMX_0_26_IP and OM_CN_SP_CMX_0_28_IP in the BFD solution. Set up routes in the customer network for this.
____.____.____.____	/32	<OSS-IP>	OSS server in customer network
____.____.____.____	/32	<DNS-SERVER-1-IP>	DNS server in customer network
____.____.____.____	/32	<DNS-SERVER-2-IP>	DNS server in customer network
____.____.____.____	/32	<NTP-SERVER-1-IP>	NTP server in customer network
____.____.____.____	/32	<NTP-SERVER-2-IP>	NTP server in customer network
____		<HOSTNAME-SC-1>	Hostname of SC-1
____		<HOSTNAME-SC-2>	Hostname of SC-2
____		<HOSTNAME-PL-3>	Hostname of PL-3
____		<HOSTNAME-PL-4>	Hostname of PL-4
____		<HOSTNAME-PL-5>	Hostname of PL-5
____		<HOSTNAME-PL-6>	Hostname of PL-6
____		<HOSTNAME-PL-7>	Hostname of PL-7
____		<HOSTNAME-PL-8>	Hostname of PL-8
____		<HOSTNAME-PL-9>	Hostname of PL-9
____		<HOSTNAME-PL-10>	Hostname of PL-10
____		<HOSTNAME-PL-11>	Hostname of PL-11
____		<HOSTNAME-PL-12>	Hostname of PL-12

NOTE! The <DNS-SERVER-[1, 2]-IP> parameters are mandatory and needs to point to a workin DNS.

10 References

- [1] Function Specification Subscriber Activation
3/155 17-CSH 109 628 Uen
- [2] Hardware Specification
1/2135-CSH 109 628 Uen
- [3] User Guide for Subscriber Activation
1/1553-CSH 109 628 Uen
- [4] System Administrators Guide for Native Deployment
1/1543-CSH 109 628 Uen
- [5] Network Description and Configuration for Native Deployment
2/1551-CSH 109 628 Uen