Job Aid

Pre-Installation Network Worksheet—S8700 Multi-Connect

S8700 Media Server for Multi-Connect Configuration

Before you install and configure an Avaya media server, complete the preinstallation worksheet for the Multi-connect configuration.

Allow up to 4 hours to complete the worksheet. If you do not have this information complete, DO NOT BEGIN THE SERVER CONFIGURATION. DO NOT GUESS AT THESE NUMBERS. To do so could corrupt the customers network.

Review this worksheet with and get the data to fill it out from the customer corporate **LAN administrator**.

Default values are shown in braces.

- The administrator may require you to change IP addresses to prevent conflicts with existing endpoints on the corporate LAN. Make precise notes of any changes and follow instructions exactly.

CAUTION:

It is crucial to coordinate the IP addresses that will be used with your Avaya media server with those on the enterprise LAN. If you specify an Ethernet address for the Avaya server component that conflicts with another Ethernet endpoint, the resulting problems with traffic on the local area network may be extremely difficult to diagnose and solve.

This worksheet is made of sections as follows:

QoS Policy

The network administrator must define the quality policy for telephony applications on the corporate enterprise network.

QoS Design Background

Will VLANs and Priority be used? (Y/N)_____

If Yes:

- What priority (6 recommended)_____
- What VLAN(s)_____
  (Show VLAN assignment by Subnet if not consistent across the Corporate Enterprise LAN)
- Will VLAN IDs for the server be tagged in the telephony product or by the Ethernet switch?_____
- Will priority be tagged in the telephony product or by the Ethernet switch?_____
- Will VLAN IDs for the IP telephones be tagged by the telephones or by the Ethernet Switch?_____
  ___
  (If by Ethernet switch, configure VLAN IDs in the DHCP server)

Will Diffserve be used on IP connections?_____

- What Diffserve Value for Telephony will be used?_____
  (Recommend 46)
  - What Refresh time?_____
  - What Retry?_____
  - What Profile?_____

License and Registration Data

The following information wil be required when using the either the Remote Feature Activation (RFA) web site or the Automatic Registration Tool (ART) web site.

RFA Data

SAP Order number: _____

Serial Number of 'Reference' TN2312 IP Server Interface (IPSI) circuit pack: _____
This serial number may not be available until delivery of equipment. This serial number is used in the creation of the license file that will be used on the S8700 Media Server. The IPSI circuit pack that will be closest, from a logical data point of view, to the media servers should be selected. This will decrease the amount of intervening equipment that could cause a lapse in communication with the reference IPSI.

NOTE:
Product/alarm ID (PID) numbers will be obtained by RFA and incorporated into the S8700 servers via the license file.

Automatic Registration Tool Data

Full telephone number for the line used to access the S8700 Media Servers modems: _____

ART needs this information to generate a skeleton MAESTRO record for the S8700 Media Server installation. ART will provide the following information to the user:

- Two Avaya IP addresses to configure into the servers. See item(s) 7a, 7b under the ''For the Set Modem Interface screen (7x)'' on page 11

Software Release - Patches - Firmware Versions

Enter the software release that should be installed on the S8700 Media Servers:_____

Enter any patches that should be installed on the S8700 Media Servers:_____

Enter the firmware version that should be installed onthe TN2312 IPSI boards:_____

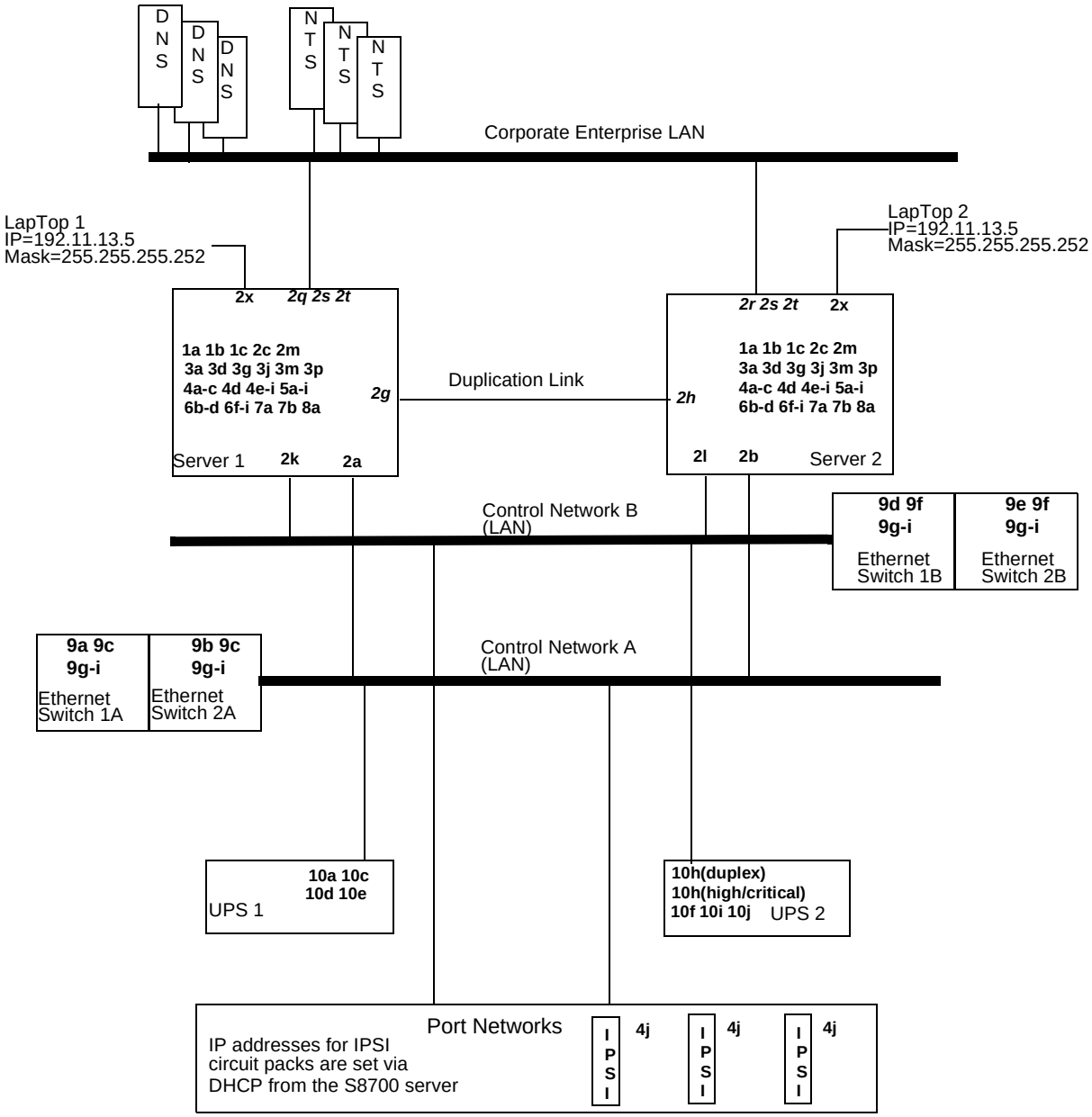

Figure 1. Multi-Connect Component Connectivity

Avaya S8700 media server for multi-connect configuration worksheet

The worksheet items are arranged in the order in which they are needed during server configuration. For an illustration of these items, see Figure above. Each entry is identified with an alphanumeric reference. IP address entries are shown in ''Multi-Connect Component Connectivity'' on page 4 by their reference number.

For the Set Server Identities Screen

NOTE:
Server number 1 & 2 must be on the same subnet (be sure to configure both servers)

Server names (1x)

These should also be administered on any relevant corporate DNS servers. This information must be supplied by the corporate LAN administrator. Do not guess at a name, it could conflict with an existing name.

1a Name of server 1: _____

1b Name of server 2: _____

1c Active server name: _____

Ethernet interface functions (1x)

Control network B is only used for high- and critical-reliability configurations; the others are always present.

NOTE:
For Ethernet interface functions, always use the defaults unless specifically instructed to do otherwise. Physical cabling will have to match what is entered here.

1d Function assigned to Ethernet 0: {control network A} _____

1e Function assigned to Ethernet 1: {services laptop} _____

1f Function assigned to Ethernet 2: {duplication link} _____

1g Function assigned to Ethernet 3: {control network B} _____
Note In a duplex configuration this Ethernet port should be set to {Unused}

1h Function assigned to Ethernet 4: {corporate LAN} _____

For the Configure Ethernet Interfaces screen (2x)

Ethernet 0 default addresses (for control network A):

2a Server 1 IP address on control network A: {198.152.254.201} _____
The same data will be entered at **10c, 10h(Duplex)**

2b Server 2 IP address on control network A: {198.152.254.202} _____

2c Active server IP address on control network A: {198.152.254.200} _____
The same data will be entered at **9c**

2d Subnet mask for control network A: {255.255.255.0} _____

2e Speed of link (10 or 100 megabit, full or half duplex): {autosense} _____

2f VLAN 802.1q priority tagging: {off} _____
Note: Tagging should be set the same on both control networks

Ethernet 2 default addresses (for duplication link):

2g Server 1 IP address on duplication link: {192.11.13.13} _____

2h Server 2 IP address on duplication link: {192.11.13.14} _____

2i Subnet mask for the duplication link: {255.255.255.252} _____

2j Speed of link (100 megabit, full duplex): {autosense} _____

Ethernet 3 default addresses (for control network B, if present):

2k Server 1 IP address on control network B: {198.152.255.201} _____

2l Server 2 IP address on control network B: {198.152.255.202} _____
The same data will be entered at **10h (High/Critical)**

2m Active server IP address on control network B: {198.152.255.200} _____
The same data will be entered at **9f**

2n Subnet mask for control network B: {255.255.255.0} _____

2o Speed of link (10 or 100 megabit, full or half duplex): {autosense} _____

2p VLAN 802.1q priority tagging: {off} _____
Note: Tagging should be set the same on both control networks

Ethernet 4 addresses (for corporate LAN, no default values):

2q Server 1 IP address on the corporate LAN: _____

2r Server 2 IP address on the corporate LAN: _____

2s Active server IP address on the corporate LAN: _____

2t Gateway IP address for the corporate LAN: _____

2u Subnet mask for the corporate LAN: _____

2v Speed of link (10 or 100 megabit, full or half duplex): {autosense} _____

2w VLAN 802.1q priority tagging: {off} _____

Ethernet 1 addresses are fixed for the services (laptop) interface:

NOTE:
This address and subnet mask are fixed and not changeable.

2x Service IP address for every Avaya media server: 192.11.13.6

Subnet mask for the laptop link: 255.255.255.252

For the Control Switches and UPS screen (3x)

Specify the Ethernet switches for each control network

Two may be two used per control network if there are a large number of port networks.

Number of Ethernet switches per control network: {1} _____

3a Ethernet switch 1 IP address on control network A: {198.152.254.240} _____
The same data will be entered at **9a**

3b SNMP GET (read) community string: {public} _____

3c SNMP SET (write) community string: _____

3d Ethernet switch 2 IP address on control network A: {198.152.254.241} _____
The same data will be entered at **9b**

3e SNMP GET (read) community string: {public} _____

3f SNMP SET (write) community string: _____

3g Ethernet switch 1 IP address on control network B: {198.152.255.240} _____
The same data will be entered at **9d**

3h SNMP GET (read) community string: {public} _____

3i SNMP SET (write) community string: _____

3j Ethernet switch 2 IP address on control network B: {198.152.255.241} _____
The same data will be entered at **9e**

3k SNMP GET (read) community string: {public} _____

3l SNMP SET (write) community string: _____

Specify the UPS units for each control network

Note: There are always 2 UPS units. For a Duplex reliability configuration they both have addresses on Control Network A. For the High/Critical reliability configuration one will have an address on control network A and one will have an address on control network B.

Number of UPS units for the control network: {2} _____

3m UPS 1 IP address on control network A: {198.152.254.239} _____
The same data will be entered at **10a**

3n SNMP GET (read) community string: {public} _____

3o SNMP SET (write) community string: _____

High/Critical
3p UPS 2 IP address on control network B: {198.152.255.239} _____
The same data will be entered at **10f**

Duplex
3p UPS 2 IP address on control network A: {198.152.254.238} _____
The same data will be entered at ***??***

3q SNMP GET (read) community string: {public} _____

3r SNMP SET (write) community string: _____

For the DNS and DHCP Server Configuration screen (4)

Optional: If domain name service (DNS) servers are to be used, complete as many of the following fields as needed to set up DNS service and limit unresolved name searching. Fill out only as many server and search domain fields as are needed:

4a DNS server 1 IP address: _____

4b DNS server 2 IP address: _____

4c DNS server 3 IP address: _____

4d DNS domain name: _____

4e Search domain name 1: _____

4f Search domain name 2: _____

4g Search domain name 3: _____

4h Search domain name 4: _____

4i Search domain name 5: _____

Specify whether the Avaya media server will provide DHCP service, or whether IPSI IP addresses will be manually assigned:

4j Enable DHCP service on media servers: {yes} _____

For the Set Static Network Routes screen

Optional: Enter any static IP addresses specified by the customer's LAN administrator.

	IP address of endpoint server is trying to reach	Subnet mask used by all endpoints	Gateway IP address (optional)	Ethernet interface (optional)
5a				
5b				
5c				
5d				
5e				
5f				
5g				
5h				
5i				

For the Network Time Server screen (6x)

6a Is a Network Time Server (NTS) available to be used as the time source? (y/n) _____
Note: If a NTS is available, both servers in the S8700 Media Server complex should be administered to synchronize with it. Select the second radio button on the screen and fill in the fields detailed below on both servers.

If an external NTS is not available both servers should have the first radio button selected on the Network Time Server screen. In this case Server 1 will always act as a Network Time Server and Server 2 will synchronize with it.

If NTSs are available, enter their DNS names or IP addresses

6b Primary NTS name or IP address: _____
Trusted Key _____(Leave blank if not used

6c Secondary NTS name or IP address: _____
Trusted Key _____(Leave blank if not used

6d Tertiary NTS name or IP address: _____
Trusted Key _____(Leave blank if not used

6e Multicast Client Support? (Y/N): _____

Additional Keys
(Leave blank if not used)

6f Trusted Key:_____

6g Requested Key:_____

6h Control Key:_____

6i Will a *Keys file* be used (Y/N): ____
Note: If Yes, it must be supplied during this configuration step and should reside in the ***/var/home/ftp*** directory.

For the Set Modem Interface screen (7x)

Specify the IP address for each server's modem (this information must be provided by Avaya Services if a maintenance contract is in force) This data will be supplied by the Automatic Registration Tool (ART):

7a IP address of the PPP dial-up link for server 1: _____

7b IP address of the PPP dial-up link for server 2: _____

Use the default return routes (unless specifically instructed to change them). The default return route codes for Avaya Service are:

Information	IP address	Subnet mask
Services return route for PPP dial-up connection (if Avaya supports)	135.9.0.0 135.17.0.0 135.39.0.0 135.60.0.0 198.152.171.0 198.152.171.0	255.255.0.0 255.255.0.0 255.255.0.0 255.255.0.0 255.255.255.0 255.255.255.0

For the Configure Trap Destinations screen (8x)

Specify Simple Network Management Protocol (SNMP) data trap destination. This information will allow the active server to send SNMP trap information to a Network Management System, i.e. CajunView.

8a IP address of SNMP trap receiver: _____

8b SNMP protocol version (1, 2c or 3): _____

Required for version 1:

8c Community name: _____

Required for version 2c:

8d Notification type (trap/inform): _____

8e Community name: _____

Required for version 3:

8f Notification type (trap/inform): _____

8g User name: _____

8h Security model (none, authentication, or privacy): _____

8i Authentication password (required for authentication and privacy model):
_____

8j Privacy password (required for privacy model): _____

Other Media Server complex components

Ethernet Switch(s) (9x)

The following information will be configured directly in the Ethernet switch(s)

IP Address on control network A

9a Ethernet switch 1 IP address on control network A: {198.152.254.240} _____
Use IP address from entry **3a**

9b Ethernet switch 2 IP address on control network A: {198.152.254.241} _____
Use IP address from entry **3d**

Trap receiver destination on control network A

9c Trap receiver destination for both Ethernet switches on control network A: {198.152.254.200}_____
Use IP address from entry **2c**

IP Address on control network B

9d Ethernet switch 1 IP address on control network B: {198.152.255.240} _____
Use IP address from entry **3g**

9e Ethernet switch 2 IP address on control network B: {198.152.255.241} _____
Use IP address from entry **3j**

Trap receiver destination on control network B

9f Trap receiver destination for both Ethernet switches on control network B: {198.152.255.200}_____
Use IP address from entry **2m**

Community Strings for all Ethernet Switches

9g Community String: {Public}_____ Community Access: {Read-Only}_____

9h Community String: {Public}_____ Community Access: {Read-Write}_____

9i Community String: {Public}_____ Community Access: {trap}_____

Uninterruptible Power Supplies

UPS 1

10a UPS 1 IP address on control network A: {198.152.254.239} _____
Use IP address from entry **3m**

10b Subnet Mask for UPS 1 on control network A:{255.255.255.0}_____

10c Default gateway for UPS 1 on control network A:{198.152.254.201}_____
Use IP address from entry **2a**

10d SNMP GET (read) community string: {public} _____

10e SNMP SET (write) community string: _____

UPS 2

High/Critical
10f UPS 2 IP address on control network B: {198.152.255.239} _____
Use IP address from entry **3p**

Duplex
10f UPS 2 IP address on control network A: {198.152.254.238} _____

10g Subnet Mask for UPS 2 on control network A:{255.255.255.0}_____

High/Critical
10h Default gateway for UPS 2 on control network B:{198.152.255.202}_____
Use IP address from entry **2l**

Duplex
10h Default gateway for UPS 2 on control network A:{198.152.254.201}_____
Use IP address from entry **2a**

10i SNMP GET (read) community string: {public} _____

10j SNMP SET (write) community string: _____

Other Interfaces - Not in the S8700 Media Server complex

Control Lan (CLAN - TN799), Media Processor (MP - TN2302), and Voice Announcement over Lan (VAL -TN2501) resources in the media gateway port networks will require network configuration. Use the following table to gather required information for these interfaces.

NOTE:
These resources are not shown in ''Multi-Connect Component Connectivity'' on page 4. They will be configured using Avaya Site Administration in the Avaya MultiVantage software application.

Resource Type (CLAN, MP, VAL)	DNS/ Multivantage Name	USE	Port Network Location	IP Address	Subnet Mask	Gateway	Speed/ Duplex	VLAN	Firm Ware Version