

Creating IP Plan for SBC SWe

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Creating a SBC SWe IP Plan

Prior to installing the SBC SWe you need to have some information on hand to define the VM's communication interfaces and network configuration on the VMware or KVM Host. Create an IP Plan prior to installing the SBC SWe software. It is important to record the IP information so that your system information is readily available when you begin installing the software. Maintain this information as a reference for future configuration changes.



Note

Three management IP addresses are required for configuration of the VM management network: an IP address is required for each VM, and a shared IP address is used by both VMs, depending on required network connections.

The following tables provide example SBC IP plan information. The following table shows an example of IP information needed for the VMware or KVM Host.

Table 1: Installation IP Checklist for VMware or KVM Host

Parameter	Example
Primary network interface name (Host subnet - physical port)	eth0
Host name	norwayxxx01
IP address of the Host subnet (Host Management interface)	10.9.9.103
Default router	10.9.9.1
Netmask of subnet	255.255.255.0

Create an IP Plan prior to installing the SBC SWe software. The IP Plan is generally completed using an Excel spreadsheet, and is intended to capture information such as hostname, logical IP addresses, and so forth to help configure the SBC SWe system. It is important to complete this document (even for simple networks) so your system information is readily available when you begin installing the software, and to maintain this information as a reference for future configuration changes.



Note

If needed, please contact Sonus for an example IP Plan.


Example IP Plan Information



The following example is for a redundant High Availability (HA) configuration with one standby SBC Virtual Machine protecting the active SBC Virtual Machine.




Caution


Ensure the Management and Media IP addresses are on different subnets to avoid potential conflicts.

SBC SWe System Information	Description	Example/Recommendation
SBC System Name	<p>This is the name of the overall SBC system, and is used as the designation of all servers within HA pair. See System Name and Hostname Conventions for naming conventions.</p> <p>If external routing is used, the system name is referred to by the PSX.</p> <p>You MUST use the same name on the Active and Standby system installation.</p>	DALVSBC01
Local Host/Node name (ceName)	<p>Name of the primary server. Typical naming convention is "<system name>a".</p> <p>A best practice is to include the "a" suffix even for stand-alone systems to facilitate easy upgrade to HA in the future.</p>	DALVSBC01a
Peer Host/Node name (ceName)	(HA only) Name of the secondary server. Typical naming convention is "<system name>b".	DALVSBC01b, or none
Server Role	Specifies the role of the SBC VM.	Active/Standby
Time zone	<p>The time zone used in your billing records. Can be the time zone of the location of the SBC system.</p> <div data-bbox="326 1083 984 1188" style="border: 1px solid #ccc; padding: 5px; margin: 10px 0;">  Changing the time zone will cause the application to restart. </div>	gmtMinus06-Central- US
SBC SWe System Contact	Contact name and phone number to use for physical support.	Joe Smith 888-555-1212
SBC SWe System Location	Physical location of the system.	Dallas, TX
NTP Primary IP Address	The primary IPv4 or IPv6 address of the NTP server. A NTP source is necessary for correct system operation.	10.11.12.2/24 or fd00:10:6b50:4130:1
NTP Secondary IP Address	The optional secondary IPv4 or IPv6 address of the NTP server.	10.11.12.3/24 or fd00:10:6b50:4130:2

TIPC NETID	<p>Specifies unique Transparent Inter-process Communication (TIPC) network communications protocol network identity. This network identity must be same in both active and standby VMs for inter-process communication.</p> <p>Recommendation is to use default value when configured for single HA pair on HA subnet (subnet for HA ports of active/standby).</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">  TIPC NETID must be unique for a given HA pair in any given cluster. </div>	1500 (default)
Logical Management IP Address	<p>This IP address can be used to access the active unit, it is not tied to a particular physical unit. When a unit becomes active, this IP address “moves” to that unit.</p> <p>Logical management IP address should be from same subnet as the physical management IPs.</p>	10.11.13.3 (or any IP address within the Management IP subnet)
Logical Management IP Address Name	The name of the Logical Management IP (used for reference purposes only).	DALNBS01_MGMT
Unit A and Unit B Information	Configure these details on Unit A only (IP address information moves from Unit A to B on a fail-over)	
Packet Ports		
Packet Port 0 IP Address	The IP address of the pkt0 interface. SIP and RTP traffic use this physical interface. This IP address is used for RTP traffic (SIP traffic uses a different IP address).	10.11.14.1
Packet Port 0 VLAN	The VLAN tag of the pkt0 interface (optional).	100
Packet Port 0 Netmask	The Netmask of the pkt0 interface (in “prefix” format).	/24
Packet Port 1 IP Address	The IP address of the pkt1 interface. SIP and RTP traffic use this physical interface. This IP address is used for RTP traffic (SIP traffic uses a different IP address).	10.11.15.1
Packet Port 1 VLAN	The VLAN tag of the pkt1 interface (optional).	200
Packet Port 1 Netmask	The Netmask of the pkt1 interface (in “prefix” format).	/24
HA Ports (not applicable for stand-alone configuration)		
<div style="border: 1px solid black; padding: 5px;">  The HA ports of active and standby SBC nodes should be on the same subnet when the boxes are not directly connected. </div>		

Active CE IP	<p>Specifies the active VM IP address in HA pair. The Active CE uses this IP which is configured to the HA port to communicate/synchronize/mirror the data with the Standby CE.</p> <p>These Inter CE IP addresses should be in a different network from the management network.</p> <p>Recommendation is to use default value when configured for single HA pair on HA subnet (subnet for HA ports of active/standby).</p>	<p>169.254.99.1 (default)</p> <p>Active and Standby CE IP addresses must be in the same subnet.</p>
Standby CE IP	<p>Specifies the standby VM IP address in HA pair. The Standby CE uses this IP which is configured to the HA port to communicate/synchronize/mirror the data with the Active CE.</p> <p>These Inter CE IP addresses should be in a different network from the management network.</p> <p>Recommendation is to use default value when configured for single HA pair on HA subnet (subnet for HA ports of active/standby).</p>	<p>169.254.88.1 (default)</p>
HA Interface Mask (Inter CE Prefix)	<p>Netmask of the network in which the Active/Standby IPs are configured.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p> If default Active and Standby CE IP addresses are not used, use Inter CE prefix as '255.255.255.0'.</p> </div>	<p>255.255.0.0 (default)</p>

Management Ports

 The configuration of the IP management interface is performed as part of the initial-bootscrip, and is not meant to be re-configured through the EMA. Each SBC SWe has a redundant pair of physical ports for managing traffic.

Primary Management IPv4 Address	This specifies the physical management IPv4 address associated with the primary management network.	10.11.13.10
Primary Management Network Mask	This specifies the Netmask of the primary management network.	255.255.255.0
Primary Management Gateway IPv4 Address	This specifies the default gateway IPv4 address associated with the primary management network.	10.11.13.1
Primary Management IPv6 Address	This specifies the physical management IPv6 address associated with the primary management network.	fd00:10:6b50:4300::10b

Primary Management IPv6 Prefix Length (0-128)	This specifies the prefix of the primary management network.	60
Primary Management Gateway IPv6 Address	This specifies the default gateway IPv6 address associated with the primary management network.	fd00:10:6b50:4300::1

