Oracle® Corente Cloud Services Exchange

Corente Services Gateway Deployment Guide for Release 9.4.3

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May 2017

Oracle Legal Notices

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Preface

This document helps you to plan for Corente Services Gateway deployments and provides instructions for installing Corente Services Gateways.

Related Documentation

The documentation for this product is available at:

http://www.oracle.com/technetwork/server-storage/corente/documentation/index.html

Feedback

Provide feedback about this documentation at:

http://www.oracle.com/goto/docfeedback

Conventions

Hyperlinks can be used to navigate through the guide or the procedures related to an overall activity, or to jump to a cross-referenced topic or Internet URL.

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

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Chapter 1 Corente Services Gateway Overview

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Find out about Corente Services Gateways.

1.1 Introduction to the Corente Services Gateway

A Corente Services Gateway is software that you install at a geographic location in your Corente Services network.

Corente Services Gateways:

- Integrate with your existing network infrastructure to provide secure connectivity for users and devices.
- Connect to the Corente Services Control Point (SCP) to get configuration details for the location as well as software updates. The Corente Services Gateway also sends alerts and reports data to the Corente SCP.

1.2 Corente Services Gateway Configurations

Corente Services Gateways provide two different, but compatible, configurations.

Inline Configuration

Inline configurations require two Ethernet interfaces. One interface is connected to your internal network. The other interface is connected to an external network. In most cases the external network is the public Internet.

Inline configurations let you use a Corente Services Gateway to handle multiple network functions, such as acting as a firewall or providing DHCP services.

If three or more Ethernet interfaces are available to the Corente Services Gateway you can use inline configurations to:

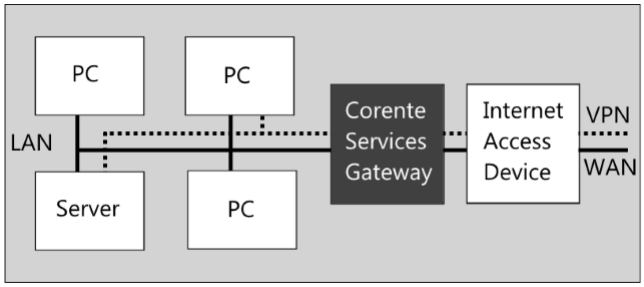
- Implement a demilitarized zone (DMZ) on your network.

  A DMZ provides a secure layer between a private LAN and the public Internet or WAN. Servers that devices can access from both the private LAN and the public Internet, such as mail or web servers, usually reside on the DMZ.

- Provide access to a backup WAN connection (Dual WAN).

  Dual WAN capabilities let you set up automatic WAN failover between a primary WAN connection and a secondary WAN connection. However, a DUAL WAN configuration does not provide load balancing between two WAN connections.

The following diagram illustrates an inline configuration:



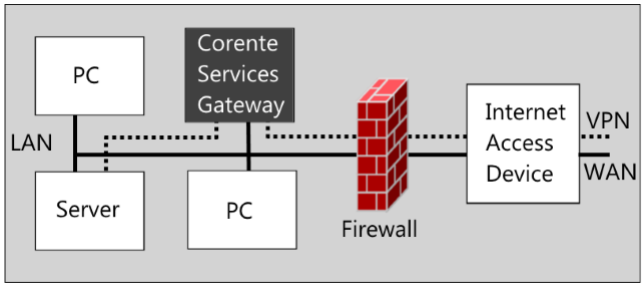
Peer Configuration

Peer configurations require one Ethernet interface that enables a Corente Services Gateway to:

- Operate with a private IP address
- Traverse firewalls enabled for Internet Connection Sharing (ICS) as well as network routers and proxies

Peer configurations let Corente Services Gateways handle Corente Services traffic while other devices on your network handle all other traffic and external access. For this reason, you should use peer configurations only if you install Corente Services Gateways behind firewalls.

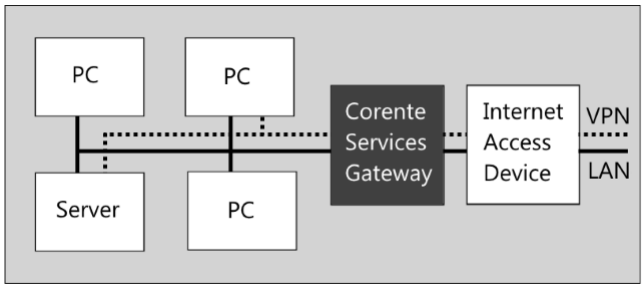
The following diagram illustrates a peer configuration:



1.3 Network Diagrams

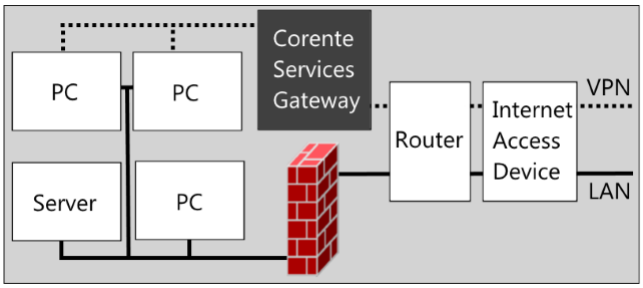
There are four standard locations where you can install a Corente Services Gateway on your LAN, as follows:

- **In front of your LAN in an inline configuration**



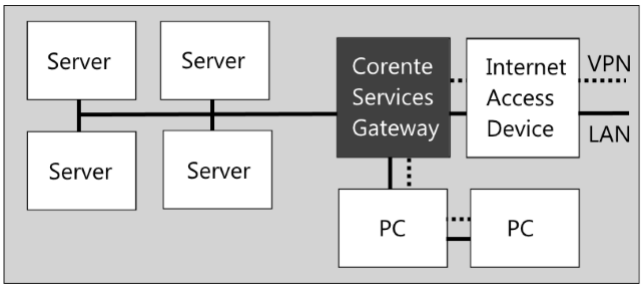
This option provides Corente Services network access and consolidates network functions such as network access, firewall, backhaul, and DHCP services into the Corente Services Gateway.

- **Beside your network firewall in an inline configuration**



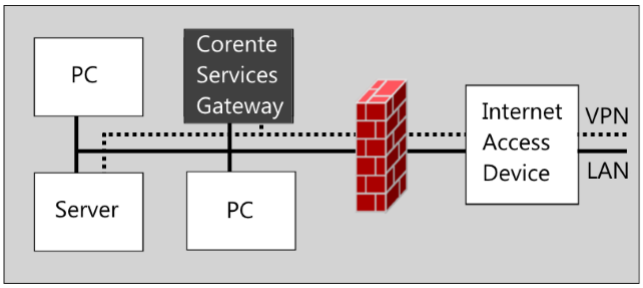
This option lets you configure your edge router to send Corente Services network traffic to the Corente Services Gateway and all other network traffic to your firewall device.

- **In front of your LAN and DMZ in an inline configuration**



This option lets you use an Ethernet interface on the Corente Services Gateway as the DMZ interface. In this configuration, servers that reside on the DMZ use a single Ethernet interface that is configured on a private subnet. The Corente Services Gateway manages all traffic that passes through the DMZ. The WAN interface on the Corente Services Gateway uses port forwarding to pass traffic to servers on the DMZ. In this configuration, all traffic that passes through the DMZ must be explicitly allowed in App Net Manager.

- **Behind your network firewall in a peer configuration**



This option applies to a Corente Services Gateway in a peer configuration where all network traffic passes through a firewall device.

1.4 Redundant Hardware Configurations

You can install redundant hardware instances of Corente Services Gateways for high availability and to allow you to perform maintenance tasks.

A redundant hardware installation consists of two Corente Services Gateways that use the same configuration, a primary instance and a redundant, or failover, instance. You configure both instances with dedicated back-channel network interfaces that are connected through a network device such as a hub or switch. The primary and failover instances then communicate through the back-channel network interface on a the `1.1.1.1/30` subnet. The failover instance detects if the primary instance becomes unavailable and then automatically takes over.

Related Information.

- Section 4.5, “Setting Up Redundant Hardware Configurations”

Chapter 2 Planning Your Corente Services Gateway Deployment

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To successfully deploy a Corente Services Gateway, you must ensure that:

- The system where you plan to install the Corente Services Gateway meets the minimum requirements.
- Your client computer meets the minimum requirements to access the App Net Manager and Gateway Viewer applications. You use these applications to configure and monitor your Corente Services Gateway.
- The Corente Services Gateway can integrate with your LAN configuration.

2.1 Corente Services Gateway Installation Requirements

You can install the Corente Services Gateway as follows:

- On any compatible server hardware
- As a virtual machine

2.1.1 Hardware Requirements

Corente Services Gateways have the following hardware requirements:

- **Processor:** 1.5 GHz Intel-based x86 compatible server (such as Pentium, Celeron, or Core i7)
- **Memory:** 1 GB RAM
- **Hard Drive:** 40 GB IDE/SATA
- **Network Interfaces:** Integrated 10/100/1000M Ethernet Interfaces

  The number of Ethernet interfaces depends on your Corente Services Gateway configuration, as follows:

  - One for peer configurations
  - Two for inline configurations
  - Three for DMZ or Dual WAN configurations
  - One dedicated interface for the back-channel failover configuration, if you plan to set up a redundant hardware.

Additionally, you must have a bootable physical media, such as a DVD, or a USB device to install Corente Services Gateways on bare metal systems.

Note

For a list of compatible hardware that is certified by Oracle for Corente Cloud Services Exchange, see: http://www.oracle.com/technetwork/server-storage/corente/documentation/index.html.

2.1.2 Supported Virtualization Environments

You can install Corente Services Gateways on the following virtualization platforms:

- Oracle VM Server for x86 Release 3.4.1 or later
- Xen 4.4
- VMware ESX 5.5
- Citrix XenServer 6.2
- Microsoft Windows Server 2012 R2 Hyper-V

2.2 Network Requirements

To integrate the Corente Services Gateway into your network, you must reserve specific IP addresses and configure IP addressing to support the Corente Services Gateway. Likewise, you must ensure that any firewall rules and network router settings allow Corente Services traffic.

2.2.1 IP Addresses

You must ensure that Corente Services Gateways are not assigned the following IP addresses:

- `10.10.0.1`
- `10.0.0.1`
- `10.255.255.254`
- `10.255.255.253`
- `127.0.0.1` (loopback address)
- `223.255.255.255`
- `1.1.1.0`
- `1.1.1.1`
- `1.1.1.2`
- `1.1.1.3`

The following information also applies to IP address configuration on your network:

- You must assign a private IP address to your LAN interface.
- Oracle recommends that you use network address translation (NAT) to:
  - Prevent IP address conflicts between locations on your network.
  - Ensure unique IP address spaces at each location on your network. Connected networks cannot have overlapping IP address ranges.

  You can configure the following NAT options in App Net Manager:

- Outbound NAT
- Inbound NAT
- Auto Resolve NAT

For more information about using NAT, see the *Corente Services Administration Guide*.

- If you plan to allocate the Corente Services Gateway with an IP address in the `10.0.0.0` range, the minimum network mask is `255.128.0.0`.
- If you plan to use an inline configuration for the Corente Services Gateway with two Ethernet interfaces, the LAN interface and WAN interface cannot reside on the same subnet.

2.2.2 Firewall Rules

If your network uses a firewall, you must configure the following rules:

Outbound Firewall Rules

- **TCP Port 443** must allow traffic from the Corente Services Gateway IP address to any IP address.

  The Corente Services Gateway requires TCP Port 443 to download configuration settings from the Corente Services Control Point (SCP) over HTTPS.

- **UDP Port 53** must allow traffic from the Corente Services Gateway IP address to any IP address. Permit traffic from Corente Services Gateway IP address to UDP Port 53 of ANY IP address (for name resolution of the SCP via DNS.

  The Corente Services Gateway uses UDP Port 53 to resolve the DNS name of the failover instance of the Corente SCP. This allows the Corente Services Gateway to automatically connect to the failover Corente SCP in the event that the primary Corente SCP becomes unavailable.

- **TCP Ports 1025 through 65535** must allow traffic from the Corente Services Gateway IP address to **TCP Destination Port 551** for any IP address.

  Port 551 is the Corente service port. The Corente service port allows trusted devices in the network to authenticate with 168-bit 3DES encrypted keys and establish secure tunnels. All traffic that passes through the Corente service port is encrypted and never leaves your Corente Services network.

- **UDP Port 551** must allow traffic from the Corente Services Gateway IP address to **TCP Port 551** for any IP address.

Inbound Firewall Rules

- **TCP Ports 1025 through 65535** must allow traffic from any IP address to **TCP Port 551** for the Corente Services Gateway IP address.
- **UDP Port 551** must allow traffic from from any IP address to **UDP Port 551** for the Corente Services Gateway IP address.

Corente Services Gateways also use certain ports and protocols to establish tunnels with Mobile Users and Third-party devices. Your firewall rules must allow traffic from Corente Services Gateways with the following ports and protocols:

- **UDP 500** for `ISAKMP`
- **UDP 4500** for `NATT`
- **IP Protocol 50** for `IPSec`

2.2.3 Network Routing

In general, you should configure your network so that the Corente Services Gateway is the default router. If your network has multiple subnets, you should enable dynamic routing, such as the RIPv2, OSPF, or BGP protocols, so the Corente Services Gateway can advertise routes for Corente Services traffic.

If the Corente Services Gateway is not the default router on your network, you might need to create static routes on your network so that traffic passes through the Corente Services Gateway. You can either configure static routes on your entire network or on each device that participates in the Corente Services network.

2.3 Client Computer Requirements

To configure and monitor your Corente Services Gateway, you must have a client computer that meets the requirements for App Net Manager and Gateway Viewer.

2.3.1 App Net Manager Requirements

Your client computer must meet the following minimum requirements to access App Net Manager:

- 256 MB of RAM
- A web browser

Important

Browser security settings can block access to App Net Manager. If you are using Microsoft Internet Explorer, you should not use a security setting higher than **Medium**.

- Oracle Java Runtime Environment (JRE) Version 1.7 or later
- Oracle Java Web Start (JavaWS)

  JavaWS is included as part of the JRE. You should not need to install JavaWS separately. However, App Net Manager is initially launched from your browser with JavaWS. For this reason, you should ensure that JavaWS is installed on your computer.

2.3.2 Gateway Viewer Supported Browsers

You can access Gateway Viewer from the following web browsers:

- Microsoft Internet Explorer 9.0 or later
- Mozilla Firefox 25.0 or later
- Google Chrome 34.0 or later

- Apple Safari 7.0 or later

Note

- You can browse file servers from Gateway Viewer only if you use Microsoft Internet Explorer.
- You can access Gateway Viewer only from a running instance of a Corente Services Gateway on your LAN.

Chapter 3 Configuring the Corente Services Gateway

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You configure Corente Services Gateways in App Net Manager. When you are installing new instance of a Corente Services Gateway, you add a Location in App Net Manager that:

- Corresponds to a geographic site in your company where you install and run a Corente Services Gateway, such as a headquarters or regional office.
- Defines the Corente Services Gateway configuration.

In App Net Manager, your Corente Services network is a unique domain that contains multiple Locations. Each Location corresponds to a Corente Services Gateway through which Corente Services network traffic passes.

3.1 Gathering Configuration Details

To configure a Corente Services Gateway you need specific information about the geographic location and the network where you plan to install the Corente Services Gateway.

Gather the following information before you configure the Corente Services Gateway:

Information	Description
Location name	Provides a meaningful name for the location in your Corente Services network.
Postal address and time zone	Specifies the geographic location where you are installing the Corente Services Gateway.
Maintenance window	Specifies a day and time to perform automatic maintenance, such as software upgrades, for the Corente Services Gateway.
Service tag or MAC address of an Ethernet interface for the system where you plan to install the Corente Services Gateway.	Acts as the unique identifier for the Corente Services Gateway to enable **Zero Touch Configuration**. **Zero Touch Configuration** requires a DHCP service so that the Corente Services Gateway can automatically acquire an IP address and related network configuration. If your network does not include a DHCP server, you must either configure network settings for the Corente Services Gateway or download the configuration from App Net Manager and manually load it on the Corente Services Gateway.
Dynamic Host Configuration Protocol (DHCP) settings	Specifies the following if you configure a DHCP connection for an Ethernet interface: • DHCP client name. • IP addresses for the primary and secondary DNS servers that provide name resolution, if the Corente Services Gateway does not dynamically retrieve network configuration.
Static IP address settings	Specifies the following if you configure a static IP address for an Ethernet interface: • IP address and subnet mask for the LAN interface. The Corente Services Gateway uses this IP address to connect to the your company's private network.

Information	Description
	• IP address for the external interface that the Corente Services Gateway uses to connect to the public Internet. • IP addresses for the primary and secondary DNS servers that provide name resolution. These are optional settings.
Point-to-Point Protocol over Ethernet (PPPOE) settings	Specifies the following if you configure a PPPOE connection for an Ethernet interface: • Credentials for the PPPOE connection. • IP address and subnet mask for the LAN interface. The Corente Services Gateway uses this IP address to connect to the your company's private network. • If you want to add the entire subnet of the LAN interface to the **Default User Group** for the Corente Services Gateway. • IP addresses for the primary and secondary DNS servers that provide name resolution, if the Corente Services Gateway does not dynamically retrieve network configuration. You can specify PPPOE settings for inline configurations only.
IP address for GRE tunnel	Specifies the IP address to use for Generic Routing Encapsulation (GRE) tunneling, if required.
Default user group settings	Configures the default user group for the Corente Services Gateway with the following: • A firewall policy. **Note** You define and maintain firewall polices in the **Global Intranet Settings** section of the domain directory in App Net Manager. • The first IP address in a specific subnet that you want to include in the default user group. You must also specify the subnet mask and configure NAT settings. • A subnet to exclude from the default user group. You then specify the first IP address and last IP address in a range. All IP addresses in that range are excluded from the default user group. User groups contain devices that can participate in the Corente Services network. When you add a Location in App Net Manager, you define the default

Information	Description
	user group.

3.2 Configuring a Corente Services Gateway

The following procedures to configure a Corente Services Gateway use the **Add Location Wizard** dialog. You can add Locations and configure Corente Services Gateways in App Net Manager using other procedures. However, if you are configuring a Corente Services Gateway for the first time, you should use the **Add Location Wizard** dialog because it guides you through the process and provides additional information for each step.

Note

The **Add Location Wizard** does not let you enable a redundant hardware configuration. To do this, you must edit the Corente Services Gateway configuration after you complete the **Add Location Wizard**. For information on editing a configuration, see the *App Net Manager Help*.

To launch the **Add Location Wizard** in App Net Manager, do the following:

1. Open a web browser and navigate to `https://www.corente.com/appnet`.
2. Launch App Net Manager and then log in.
3. Select **File** and then select **Wizards** and then **Location**.

   The **Add Location Wizard** dialog opens.

Proceed through each step of the **Add Location Wizard** to configure Corente Services Gateway. When you enter all the appropriate configuration details, select **Finish** to close the **Add Location Wizard** and then save your changes in App Net Manager.

After you install the Corente Services Gateway, you either retrieve the configuration over the Internet or download a configuration file and manually load it on the Corente Services Gateway. The Corente Services Gateway can then automatically retrieve any subsequent configuration settings that you make in App Net Manager.

Chapter 4 Installing the Corente Services Gateway

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Corente Services Gateways use Oracle Linux as the base operating system. For this reason, you can install Corente Services Gateways directly on a supported hardware system, a bare metal installation. You can also install Corente Services Gateways as virtual machines on a supported virtualization platform.

Related Information.

- Section 2.1.1, “Hardware Requirements”
- Section 2.1.2, “Supported Virtualization Environments”

4.1 Downloading and Creating Installation Media

You can download the files to install the Corente Services Gateway from the following locations:

- Oracle Software Delivery Cloud at: https://edelivery.oracle.com
- My Oracle Support (MOS) at: https://support.oracle.com

Accept the Oracle terms and conditions and then download one of the following:

Disc Image (`ISO`) File

You use the `gateway.iso` file to:

- Create bootable physical media, such as a DVD, to install the Corente Services Gateway on bare metal systems.
- Install the Corente Services Gateway as a virtual machine.

Executable (`EXE`) File

You run the `exe` file on a Microsoft Windows system to create a bootable USB drive. You can then use the USB drive to install the Corente Services Gateway on bare metal systems.

Note

You must have a USB drive with at least 1.5 GB of available space in FAT format. When you run the `exe` file, an installation wizard guides you through the process of creating a bootable USB drive.

4.2 Installing on Bare Metal Systems

To install the Corente Services Gateway on a bare metal system, do the following:

1. Create installation media.

2. Configure the BIOS or UEFI settings of the system to boot from the installation media.
3. Insert the installation media into the appropriate drive.
4. Boot the system to start the installation process.
5. Enter `yes` when prompted to confirm the installation.

   The Corente Services Gateway is installed on the system.
6. Reboot the system when the Corente Services Gateway is complete.

After the system reboots, proceed to Section 4.4, “Installing the Corente Services Gateway Configuration”.

4.3 Installing in Virtual Environments

You can install the Corente Services Gateway into any supported virtualization environment. This document provides an example of how to deploy the Corente Services Gateway in an Oracle VM environment to illustrate the process. However, it is beyond the scope of this document to explain how to install Corente Services Gateways into each supported environment. You should refer to the appropriate documentation for your virtualization platform for detailed information.

In general, when installing Corente Services Gateways into a virtualization environment, you should provision virtual machines with the following minimum resources:

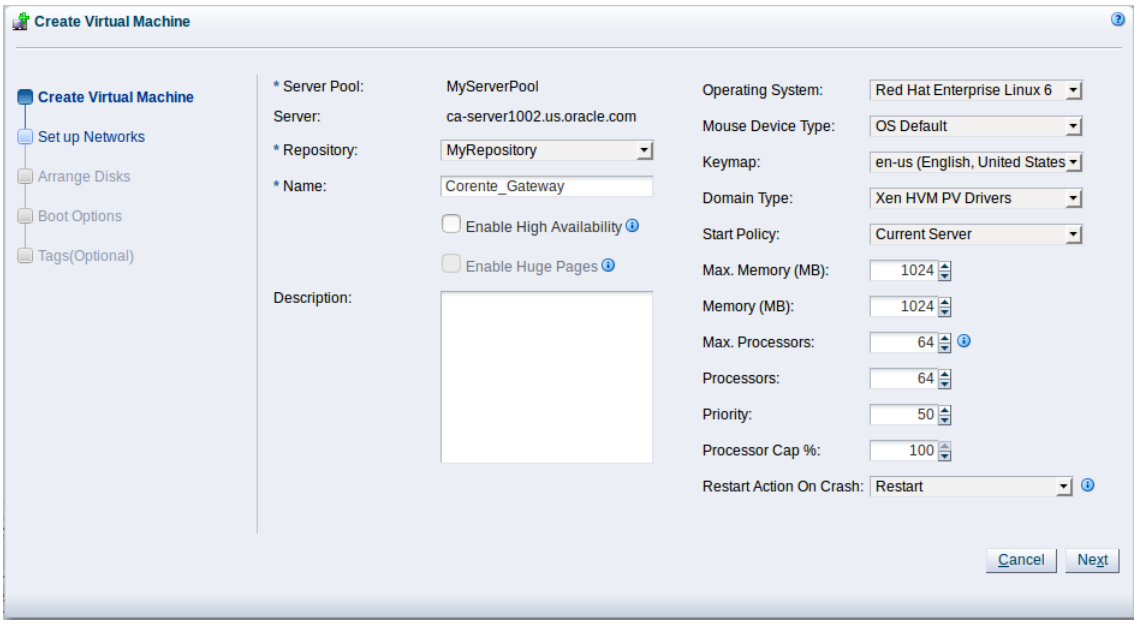
- 1 GB of memory (1024 MB)
- 40 GB of disk space for the virtual disk. However, Oracle recommends that you allocate 100 GB of disk space to provide future capacity.

The following steps describe how to install the Corente Services Gateway software in an Oracle VM environment:

1. Log into Oracle VM Manager.
2. Select the **Repositories** tab.
3. Import the Corente Services Gateway `.iso` file.
4. Select the **Servers and VMs** tab.
5. Expand **Server Pools** and then select the server pool where you want to deploy the virtual machine.
6. Right-click the server pool and then select **Create Virtual Machine**.

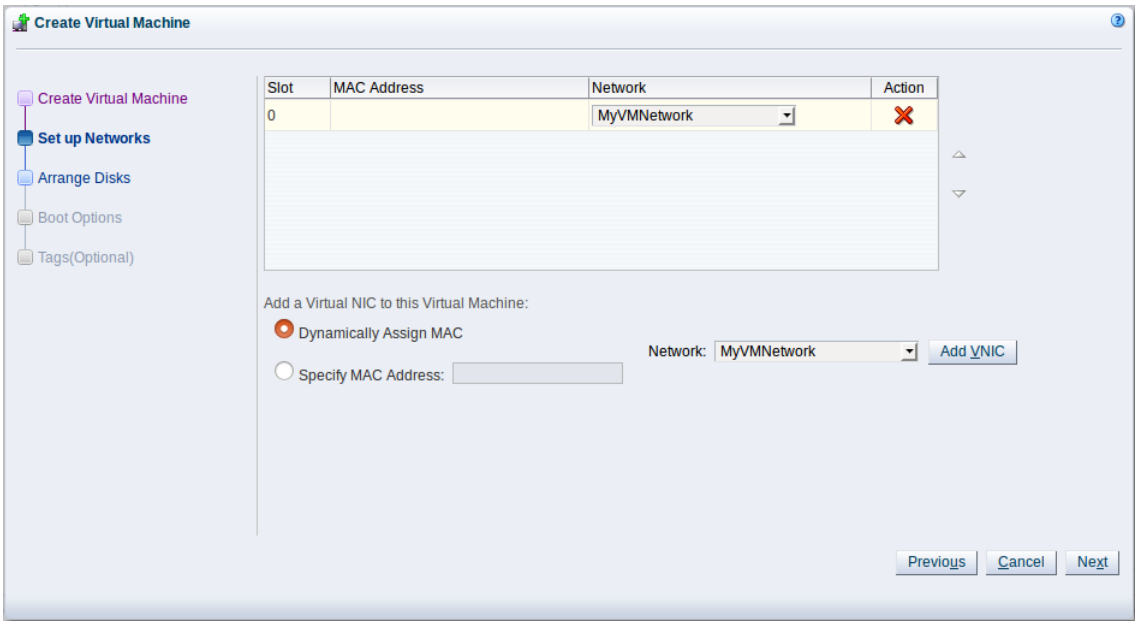
   The **Create Virtual Machine** wizard displays.
7. Select **Create a new VM** and then click **Next**.
8. On the **Create Virtual Machine** window enter a name for the virtual machine and specify the following settings:
   - **Operating System**: Select **Red Hat Enterprise Linux 6**.
   - **Memory**: Allocate at least 1 GB (1024 MB).
   - **Domain Type**: You should select **Xen HVM PV Drivers** for optimal performance.
9. Leave all other settings on the **Create Virtual Machine** window as default or specify other settings as appropriate and then click **Next**.

Figure 4.1 Creating a New Virtual Machine



10. On the **Set up Networks** window, add a virtual network interface card (VNIC) as appropriate and then click **Next**.

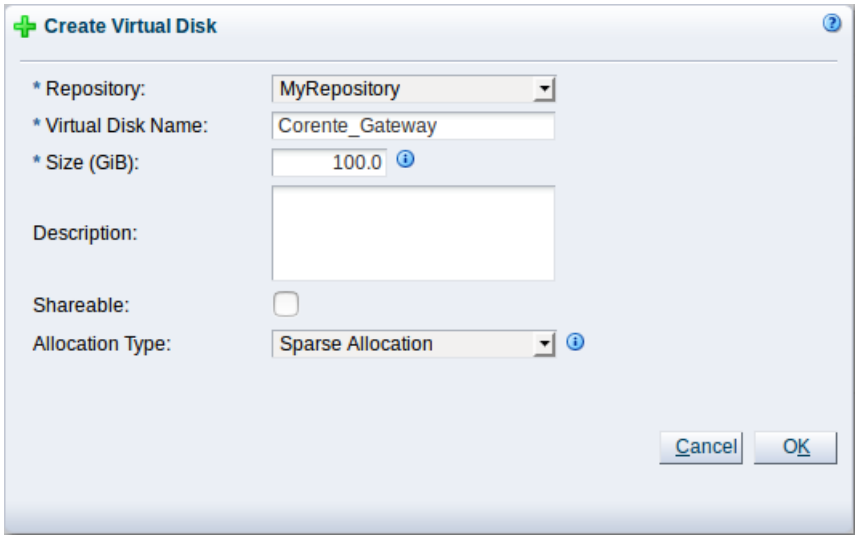
Figure 4.2 Adding a VNIC



11. On the **Arrange Disks** window, add a virtual disk to slot 0.

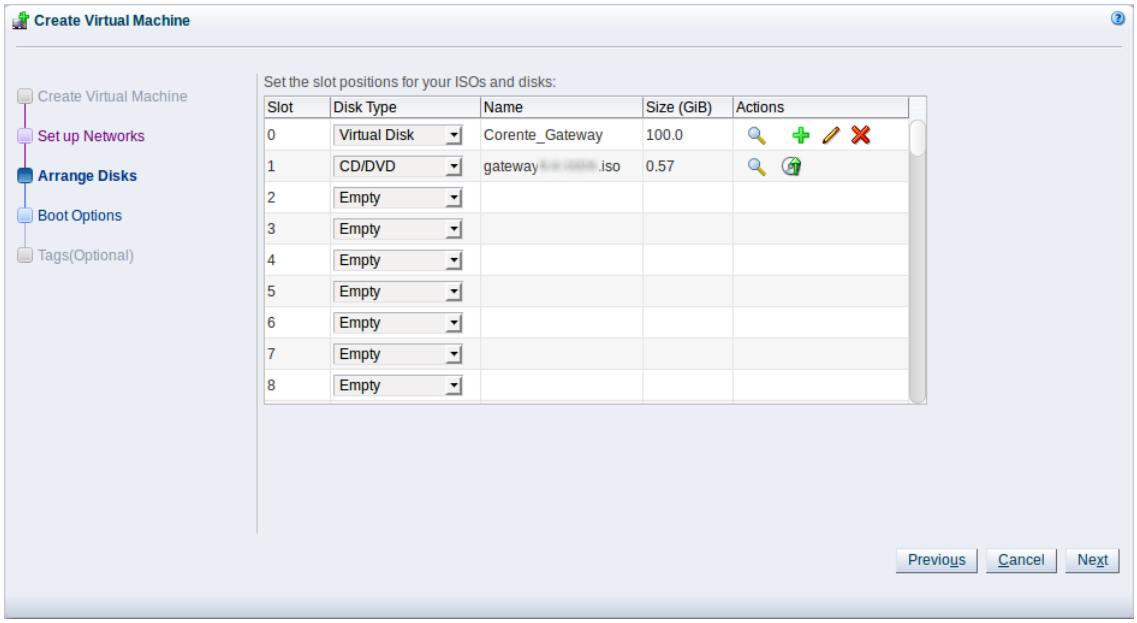
    To install Corente Services Gateway the virtual disk must be at least 40 GB. However, Oracle recommends you create a virtual disk with 100 GB to provide future capacity.

Figure 4.3 Creating a Virtual Disk



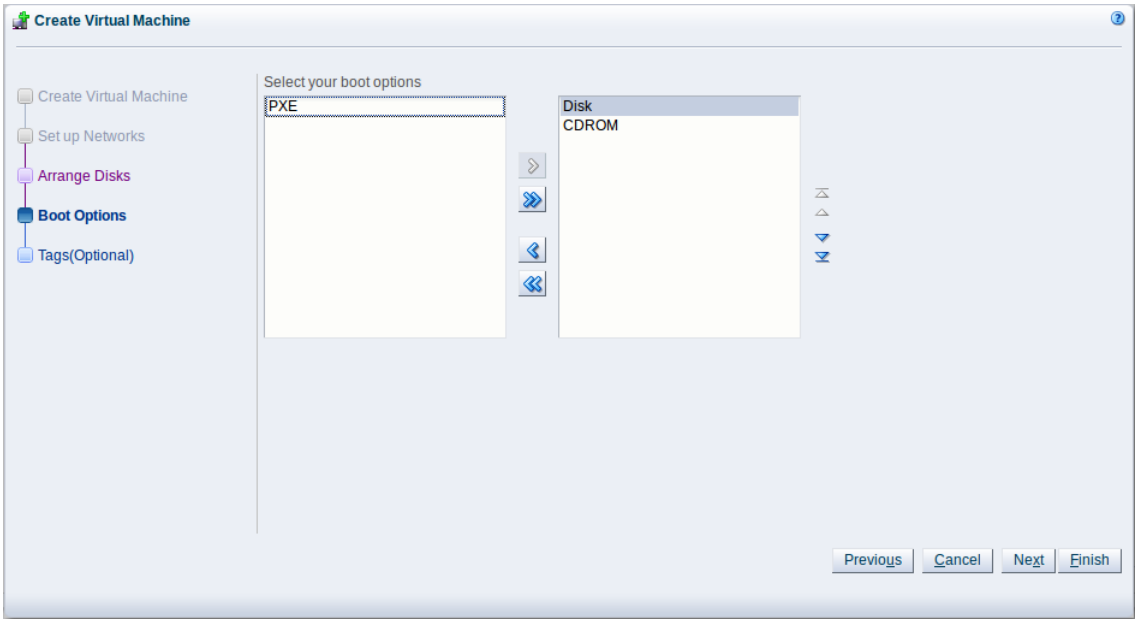
12. On the **Arrange Disks** window, attach the Corente Services Gateway `.iso` file to slot 1 and then click **Next**.

Figure 4.4 Arranging Disks



13. On the **Boot Options** window, set **Disk** as the first boot option and **CDROM** as the second boot option.

Figure 4.5 Setting Boot Options



14. Do one of the following:

    - Click **Finish** if you do not plan to add tags to the virtual machine.
    - Click **Next**, add the appropriate tags to the virtual machine on the **Tags** window, and then click **Finish**.

15. Start the virtual machine.

    Enter yes to install the Corente software.

    Install packages for Corente software. When prompted, select Reboot to complete the installation. Leave console connection open and it will reconnect after the software reboots. Then download config screen.

16. Launch the virtual machine console when the virtual machine status is **Running**.

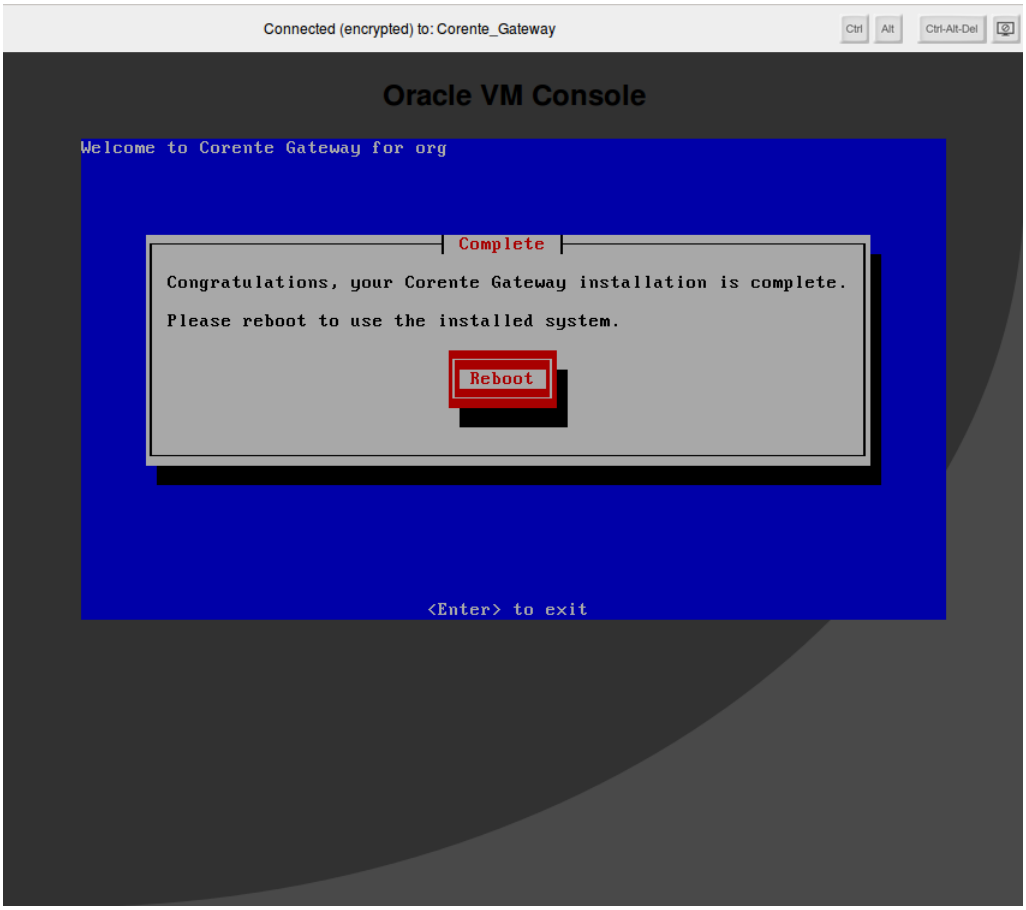
    The virtual machine console opens in a new window and displays the Corente Services Gateway installation screen.

17. Enter `yes` at the **boot:** prompt to begin the installation process.

Figure 4.6 Starting the Installation

18. When the Corente Services Gateway installation is complete, reboot the system. Leave the virtual machine console open while the system reboots. The console automatically reconnects when the virtual machine starts.

Figure 4.7 Rebooting the System



After the system reboots, proceed to Section 4.4, “Installing the Corente Services Gateway Configuration”.

4.4 Installing the Corente Services Gateway Configuration

Corente Services Gateways must retrieve the configuration that you define in App Net Manager. You can:

- Use **Zero Touch Configuration** so that the Corente Services Gateway automatically retrieves its configuration through the Corente Services Control Point (SCP).

  To use **Zero Touch Configuration**, you specify a unique identifier when you configure the Corente Services Gateway in App Net Manager. The unique identifier is either the service tag or MAC address of a Corente Services Gateway Ethernet interface.

  After the system reboots, the Corente Services Gateway automatically establishes a secure connection with the Corente Services Control Point (SCP). The Corente Services Control Point (SCP) uses the unique identifier to match the Corente Services Gateway with the correct configuration and then lets the Corente Services Gateway download it.

Note

Zero Touch Configuration requires a DHCP service so that the Corente Services Gateway can automatically acquire an IP address and related network

configuration. If your network does not include a DHCP server, you must manually configure network settings for the Corente Services Gateway.

For details about **Zero Touch Configuration** settings, see Chapter 3, *Configuring the Corente Services Gateway*.

- Download the configuration file from App Net Manager to a USB drive. You must then insert the USB into the system where the Corente Services Gateway is running.

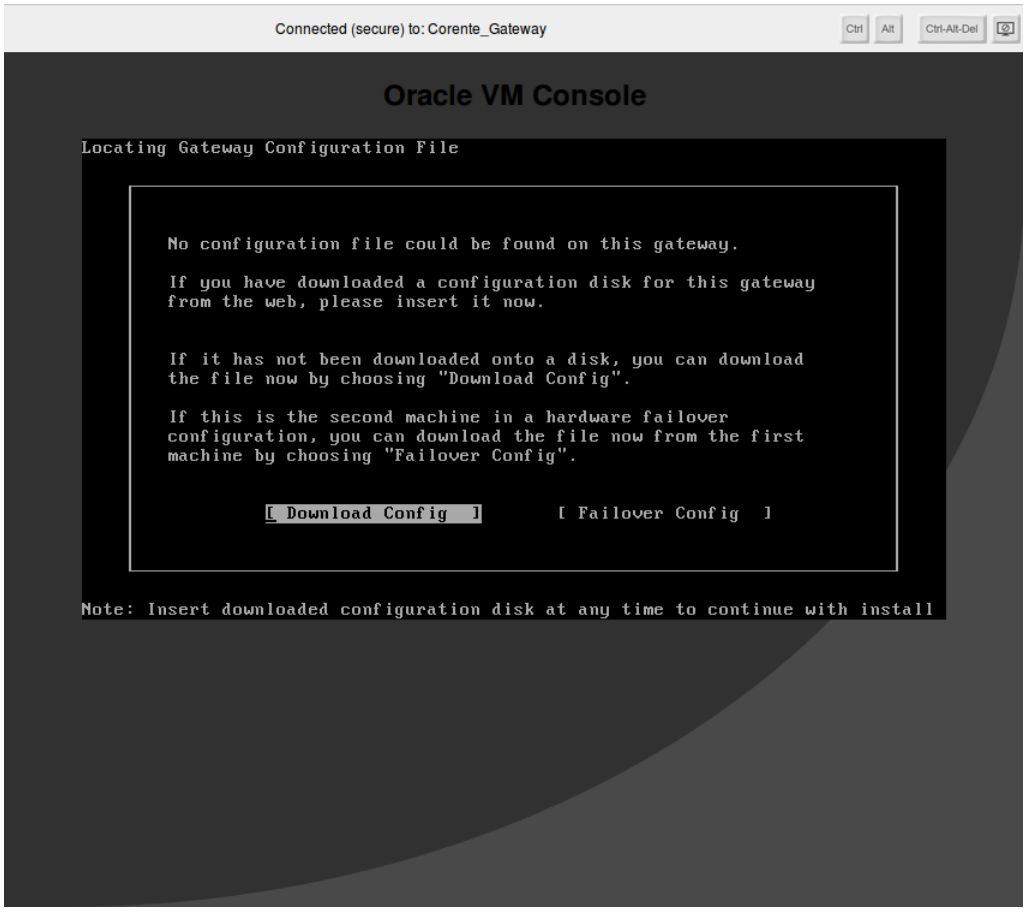
  For information about downloading configuration files, see the *App Net Manager Help*.

- Download the configuration file over the public Internet to the Corente Services Gateway. You should use this method if your network does not include a DHCP server. You must specify a static IP address and network configuration so that the Corente Services Gateway can connect to the Corente Services Control Point (SCP) and retrieve its configuration.

4.4.1 Downloading the Corente Services Gateway Configuration

If you do not use **Zero Touch Configuration**, you must download the Corente Services Gateway configuration.

After the system reboots, the Corente Services Gateway prompts you to either insert a USB drive that contains the configuration file (`org.xml`) or download it, as in the following image:



If you insert a USB drive that contains the configuration file (`org.xml`), the Corente Services Gateway automatically loads it.

To download the configuration file over the public Internet, do the following:

1. Select **Download Config**.

   The **Network Information** screen displays.

2. On the **Network Information** screen, do the following:

   1. In the **Download site** field, specify `www.corente.com`.

   2. Select the appropriate IP addressing option for Corente Services Gateway. You can set the following options:

      - **Use Automatic (DHCP) configurations** lets you automatically retrieve network configuration parameters from a Dynamic Host Configuration Protocol (DHCP) server. You can optionally specify the hostname or IP address of the DHCP server in the **DHCP Name** field.

      - **Using PPPoE (DSL)** lets you use Point-to-Point Protocol over Ethernet (PPPoE) for network configuration.

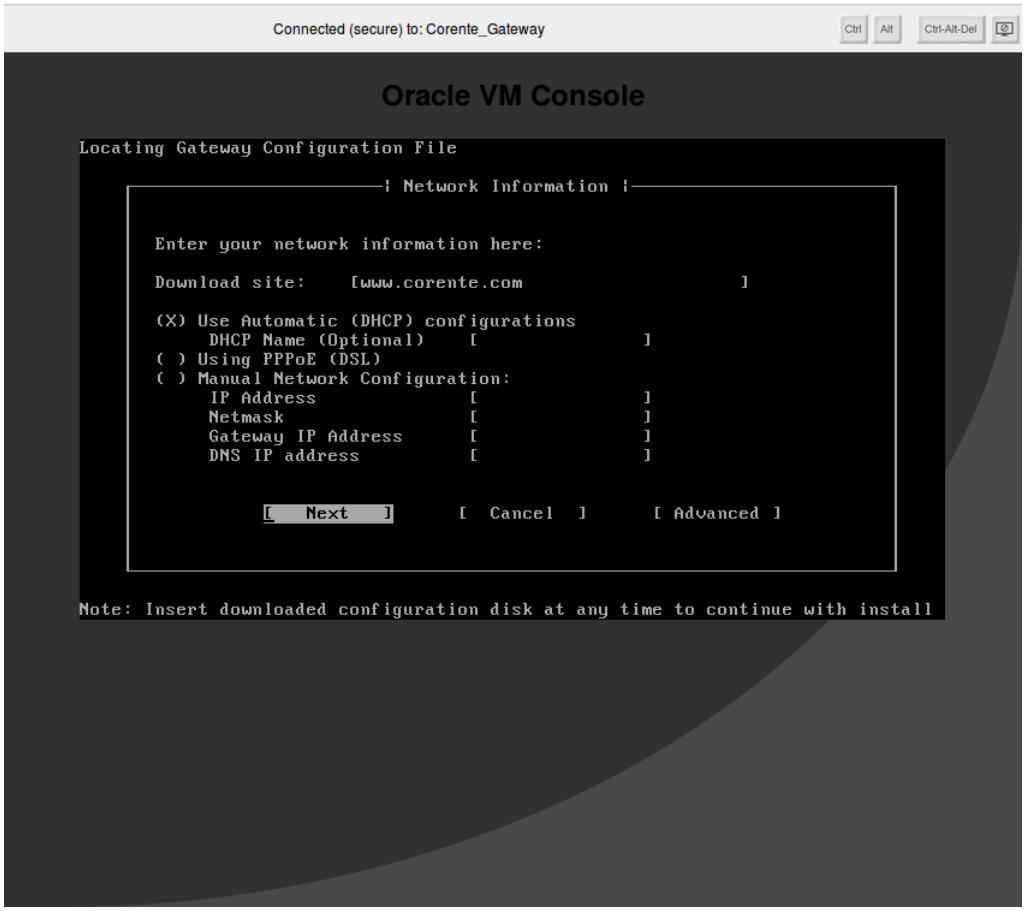
      - **Manual Network Configuration** lets you specify network configuration details.

   3. If you use a proxy server for external network access, select **Advanced** and then do the following:

      a. Select **Using HTTP Proxy Server** as the access method and then select **Continue**.

      b. Specify the IP address and port number of the proxy server and then select **Continue**.

   4. Select **Next** to continue.



3. Enter the credentials to download the configuration and then select **Continue**.

   The Corente Services Gateway downloads the configuration file.

4.4.2 Verifying the Corente Services Gateway Connection to the Corente SCP

After you install the configuration, the Corente Services Gateway securely connects to the Corente SCP. You should verify the connection as follows:

1. Log in to App Net Manager.

   For information on accessing App Net Manager, see the *Corente Services Administration Guide*.

2. Expand **Locations** in the domain directory.

3. Locate the Location that corresponds to the appropriate Corente Services Gateway.

4. Verify that the Location icon indicates that the Corente Services Gateway is connected to the Corente SCP.

   The Location icon displays in green when successfully connected, as follows: 

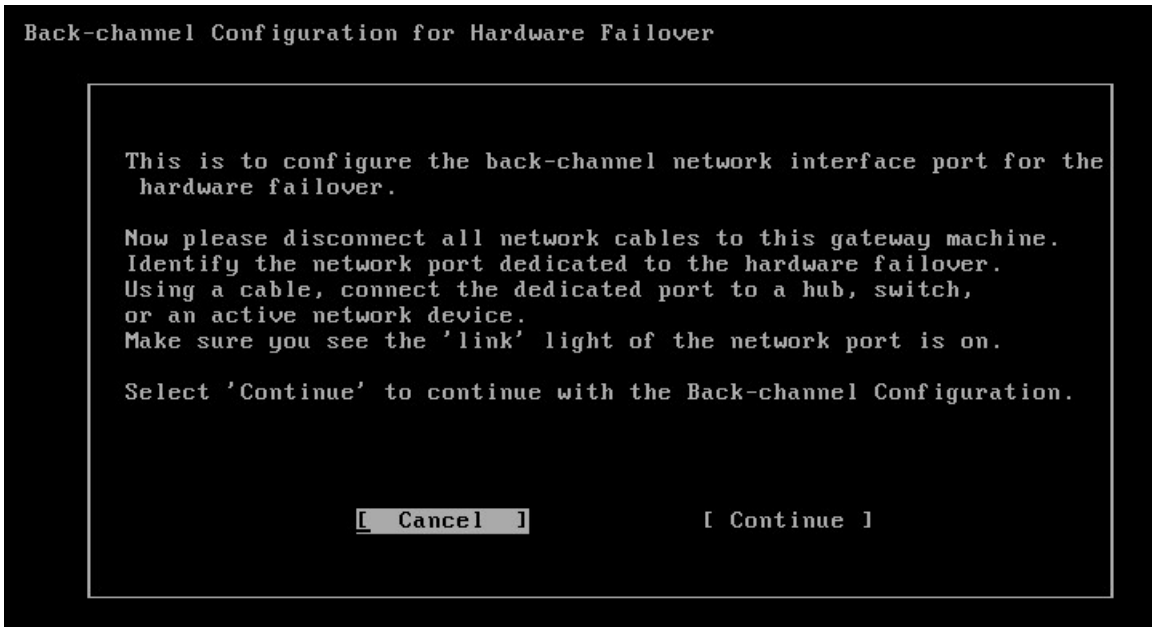
4.5 Setting Up Redundant Hardware Configurations

To set up a redundant hardware configuration, do the following:

1. Install and configure the primary Corente Services Gateway.
2. Enable the redundant hardware configuration and specify the appropriate options in the Corente Services Gateway configuration.

   See the *App Net Manager Help* for more information about redundant hardware configuration options.
3. Reboot the primary Corente Services Gateway.

   The **Back-channel Configuration for Hardware Failover** screen displays, as in the following screenshot:



4. Follow the instructions to identify the back-channel network interface port on the primary Corente Services Gateway.
5. Install the redundant Corente Services Gateway.

   After the redundant hardware system reboots, the Corente Services Gateway prompts you to download the configuration.
6. Select **Failover Config** and then follow the instructions to connect the primary and redundant Corente Services Gateways.

Related Information.

- Section 1.4, “Redundant Hardware Configurations”

Chapter 5 Building Your Corente Services Network

After you install the Corente Services Gateway configuration, the installation process is complete. As the next step, you can start building your Corente Services network with App Net Manager.

App Net Manager lets you perform administrative tasks such as:

- Configuring your Corente Services Gateway. See the *App Net Manager Help*.
- Creating secure tunnels between Locations with partner configurations. See the *Corente Services Administration Guide*.
- Setting up Mobile Users. See the *Corente Services Administration Guide*.

You can also use Gateway Viewer to administer and monitor your Corente Services Gateway. You can also allow other users to access Gateway Viewer and view and access remote devices in your Corente Services network.

For information on accessing App Net Manager or Gateway Viewer, see the *Corente Services Administration Guide*.

Chapter 6 Site Survey Checklist

Table of Contents

The site survey checklist provides all necessary information to register your Corente Services Gateway.

Contact Oracle Support if you have any questions or encounter issues while working through this checklist.

6.1 Address and Contact Information

Specify the following information for the site:

Site Name:

Company:

Address Line 1:

Address Line 2:

City:

State or Province:

ZIP or Postal Code:

Country:

Primary Administrator Contact Details

Name:

Telephone Number:

Email Address:

Secondary Administrator Contact Details

Name:

Telephone Number:

Email Address:

6.2 Firewalls and Proxy Servers

Indicate which of the following devices are in use at the site:

Firewall or **Proxy Server**

Specify the following information about the device:

Brand:

Operating System (OS):

Operating System (OS):

Version:

Can you configure the firewall or proxy settings to allow Corente Services network traffic?

Yes or **No**

For information about Corente Services Gateway network requirements, see Section 2.2, “Network Requirements”.

6.3 Corente Services Gateway Configuration

Which Corente Services Gateway configuration do you plan to use?

Inline or **Peer**

Inline Configurations

Does a DHCP server provide IP address configuration?

Yes or **No**

If you do not use a DHCP server, provide static IP address details:

WAN IP Address:

WAN Subnet Mask:

WAN Default Gateway:

WAN Primary DNS Server:

WAN Secondary DNS Server:

LAN IP Address:

LAN Subnet Mask:

Peer Configurations

Does a DHCP server provide IP address configuration?

Yes or **No**

If you do not use a DHCP server, provide static IP address details:

IP Address:

Subnet Mask:

Default Gateway:

Primary DNS Server:

Secondary DNS Server:

For information about Corente Services Gateway configurations, see Section 1.2, “Corente Services Gateway Configurations”.

6.4 Network Description

Describe your network to determine the correct placement and operation of your Corente Services Gateway. Answer the following questions, at a minimum. If possible, provide a network diagram.

- How many servers are on your network?
- How many subnets are there?
- Where do you plan to locate the Corente Services Gateway on your network?
- What are the main routing or firewall hops and IP addresses between the Corente Services Gateway and the public Internet?
- Are you replacing an existing router if you have a digital subscriber line (DSL)?
- Do you use DSL with Point-to-Point Protocol over Ethernet (PPPoE)? If so, specify the following:

  Username:

  Password:

For information about Corente Services Gateway network requirements, see Section 2.2, “Network Requirements”.