VYATTA, INC. | Vyatta System

Deployment Options

INSTALLING THE SYSTEM

Quick Find

The Vyatta system supports a number of flexible deployment options:

- Run from LiveCD
- Install on Physical Hardware
- Install into a Virtualized Environment or Cloud

Run from LiveCD

A LiveCD runs the Vyatta software on a RAM disk on the host machine. The system uses the RAM disk for writeable sections of the file system and uses an external system, such as a TFTP server or USB memory stick, for saving configuration files.

The LiveCD can run on a machine with an existing operating system without disturbing or changing the previously installed operating system. Configuration is not stored on the system, but you can save configuration to a persistent device such as a USB memory stick. Also, you cannot upgrade an installation run from LiveCD; each upgrade requires a fresh LiveCD. While you are running the system from a LiveCD, you will not be able to access other applications or programs on your machine.

A LiveCD is also required to install the Vyatta system to a persistent device, such as a hard disk.

As a method of deployment, running from LiveCD is best suited for evaluation and test scenarios.

You can read about using LiveCDs in *Installing the System: Creating and Using a LiveCD*.

Install on Physical Hardware

The Vyatta system can be installed and run on most standard x86 servers and PCs. The system can be installed from a LiveCD onto a variety of persistent devices, including hard drive, USB memory stick, and compact Flash.

You can install the system from a LiveCD you create beforehand. The install process uses the LiveCD as the source image, formats the device where the system is being installed, installs the system and, if possible, preserves configuration from previous installations. When the install process is complete, you reboot your system and the newly-installed system begins running.

NOTE *Not all hardware supports the ability to boot from USB device or Flash; check the BIOS of your hardware to see if yours does.*

You can read about installing onto a hard disk or other persistent device in *Installing and Upgrading: Hard Disks and Persistent Devices*.

Install into a Virtualized Environment or Cloud

The Vyatta system can be run as a software appliance in a virtual or cloud computing environment, allowing you to virtualize your network. The Vyatta software appliance has been optimized for a number of virtual environments. These platforms provide a great deal of flexibility as to how the virtual machine can be configured, especially with respect to memory and Ethernet interfaces. Multiple Vyatta systems can be run simultaneously on a single hardware platform configured for multiple virtual machines.

The Vyatta software can be run in the following virtual environments:

- VMware
- XenServer
- RedHat KVM
- Amazon Machine Image

VMware

Like other virtualization platforms, VMware products provide the ability to run multiple virtual systems on a single hardware platform. The Vyatta system can be run on VMware ESX and ESXi. VMware ESX and ESXi are virtualization platforms that run directly on system hardware in a 64-bit environment.

For subscription customers, Vyatta provides a prebuilt VMware template that can be used to create Vyatta virtual machines on VMware ESX or ESXi. For community customers, Vyatta provides a virtualization ISO that can be installed on VMware ESX or ESXi.

You can read about installing onto VMware in *Installing and Upgrading: VMware*.

XenServer

Citrix XenServer is a server virtualization platform. Like other virtualization platforms, XenServer provides the ability to run multiple virtual machines on a single hardware platform.

XenCenter is the management system for XenServer. XenCenter allows you to manage multiple physical servers running XenServer, in addition to all the virtual machines running on each of the physical servers.

For subscription customers, Vyatta provides a prebuilt virtual machine template for XenServer that can be used by XenCenter to instantiate Vyatta virtual machine instances on XenServers. For community customers, Vyatta provides a virtualization ISO that can be used to create a Vyatta virtual machine on XenServer.

You can read about installing onto XenServer in *Installing and Upgrading: XenServer*.

RedHat KVM

The Vyatta system supports the Red Hat Kernel-Based Virtual Machine hypervisor on RHEL. Like other virtualization platforms, the Red Hat KVM provides the ability to run multiple virtual systems on a single hardware platform. Vyatta provides a prebuilt system image that runs on the KVM on RHEL.

This feature is available only in the Vyatta Subscription Edition.

You can read about installing onto RedHat KVM in *Installing and Upgrading: RedHat KVM.*

Amazon Machine Image

Amazon Web Services (AWS) is Amazon's cloud computing service. AWS provides the tools and infrastructure required by businesses to run compute environments "within the cloud."

At the core of AWS is the Amazon Machine Image (AMI). An AMI is a virtual machine template. You instantiate virtual machines instances from the template within the AWS cloud. A variety of AMIs are available from a number of vendors. The Vyatta AMI is a version of the Vyatta Subscription Edition system packaged to run in the AWS cloud.

This feature is available only in the Vyatta Subscription Edition.

You can read about installing and using a Vyatta AMI in AWS in *Installing the System/User Guide: Amazon Machine Interface*.