



# Zenoss Core Planning Guide

Release 6.1.1

Zenoss, Inc.

[www.zenoss.com](http://www.zenoss.com)

# Zenoss Core Planning Guide

Copyright © 2018 Zenoss, Inc. All rights reserved.

Zenoss, Own IT, and the Zenoss logo are trademarks or registered trademarks of Zenoss, Inc., in the United States and other countries. All other trademarks, logos, and service marks are the property of Zenoss or other third parties. Use of these marks is prohibited without the express written consent of Zenoss, Inc., or the third-party owner.

Amazon Web Services, AWS, and EC2 are trademarks of Amazon.com, Inc. or its affiliates in the United States and/or other countries.

Flash is a registered trademark of Adobe Systems Incorporated.

Oracle, the Oracle logo, Java, and MySQL are registered trademarks of the Oracle Corporation and/or its affiliates.

Linux is a registered trademark of Linus Torvalds.

RabbitMQ is a trademark of Pivotal Software, Inc.

SNMP Informant is a trademark of Garth K. Williams (Informant Systems, Inc.).

Sybase is a registered trademark of Sybase, Inc.

Tomcat is a trademark of the Apache Software Foundation.

VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

All other companies and products mentioned are trademarks and property of their respective owners.

Part Number: 1631.18.040.11

Zenoss, Inc.  
11305 Four Points Drive  
Bldg 1 - Suite 300  
Austin, Texas 78726

# Contents

<b>About this guide</b> .....	<b>4</b>
<b>Tested operating environments</b> .....	<b>6</b>
<b>Chapter 1: Introduction to Zenoss Core</b> .....	<b>7</b>
Zenoss Core and Control Center.....	7
Key concepts.....	7
<b>Chapter 2: Deploying Zenoss Core</b> .....	<b>8</b>
Recommended host configurations.....	8
<b>Chapter 3: Packaging and distribution</b> .....	<b>9</b>
Packaging for customized installations.....	9
Zenoss Service Dynamics virtual appliances.....	9

# About this guide

*Zenoss Core Planning Guide* provides information about planning to add Zenoss Core to a Control Center deployment.

---

**Note** Zenoss strongly recommends reading the *Control Center Planning Guide* in parallel with this guide.

---

## Related Zenoss Core publications

Title	Description
<i>Zenoss Core Administration Guide</i>	Provides an overview of Zenoss Core architecture and features, as well as procedures and examples to help use the system.
<i>Zenoss Core Configuration Guide</i>	Provides required and optional configuration procedures for Zenoss Core, to prepare your deployment for monitoring in your environment.
<i>Zenoss Core Installation Guide</i>	Provides detailed information and procedures for creating deployments of Control Center and Zenoss Core.
<i>Zenoss Core Planning Guide</i>	Provides both general and specific information for preparing to deploy Zenoss Core.
<i>Zenoss Core Release Notes</i>	Describes known issues, fixed issues, and late-breaking information not already provided in the published documentation set.
<i>Zenoss Core Upgrade Guide</i>	Provides detailed information and procedures for upgrading deployments of Zenoss Core.

## Additional information and comments

Zenoss welcomes your comments and suggestions regarding our documentation. To share your comments, please send an email to [docs@zenoss.com](mailto:docs@zenoss.com). In the email, include the document title and part number. The part number appears at the end of the list of trademarks, at the front of this guide.

## Change history

The following list associates document part numbers and the important changes to this guide since the previous release. Some of the changes involve features or content, but others do not. For information about new or changed features, refer to the *Zenoss Core Release Notes*.

### **1631.18.040.11 (6.1.1)**

Update release numbers.

### **1631.18.009 (6.1.0)**

Update release numbers.

### **1631.17.320 (6.0.1)**

Controlled availability release.

### **1631.17.311 (6.0.0)**

Controlled availability release.

### **1031.17.313 (5.3.3)**

Update release numbers.

**1031.17.268 (5.3.2)**

Update release numbers.

**1031.16.242 (5.3.1)**

Update release numbers.

**1031.17.229 (5.3.0)**

Update release numbers.

**1031.17.191**

Update release numbers.

**About 5.2.5**

Version 5.2.5 was withdrawn.

**1031.17.122 (5.2.4)**

Update release numbers.

**1031.17.100 (5.2.3)**

Update release numbers.

**1031.17.058 (5.2.2)**

Update release numbers.

**1031.17.044 (5.2.1)**

Update release numbers.

**1031.16.335 (5.2.0)**

Add this history section to this guide.

Add a tested environments section to this guide.

Remove Control Center planning and storage management information. The information is now in the *Control Center Planning Guide*.

## Tested operating environments

### Zenoss Core, Control Center, and operating systems

The following table identifies the tested combinations of Zenoss Core, Control Center, and operating system releases.

Zenoss Core release	Control Center	
	Minimum release	Host OS
6.0.1, 6.1.0, 6.1.1**	1.5.0	RHEL/CentOS 7.2, 7.3, or 7.4 (64-bit)
5.3.0, 5.3.1, 5.3.2, 5.3.3	1.3.0, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.4.0, 1.4.1	RHEL/CentOS 7.1, 7.2, or 7.3 (64-bit)
5.2.0, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.6*	1.2.0, 1.2.1, 1.2.2, 1.2.3, 1.3.0, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.4.0, 1.4.1	RHEL/CentOS 7.1, 7.2, or 7.3 (64-bit)
5.1.9, 5.1.10	1.1.9, 1.2.0	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.8	1.1.5, 1.1.6, 1.1.7, 1.1.8, 1.1.9	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.7	1.1.5, 1.1.6, 1.1.7, 1.1.8	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.6 (internal release only)	(none)	(none)
5.1.4, 5.1.5	1.1.5, 1.1.6, 1.1.7	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.3	1.1.2, 1.1.3, 1.1.5	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.2	1.1.2, 1.1.3	RHEL/CentOS 7.1 or 7.2 (64-bit)
5.1.1	1.1.1, 1.1.2	RHEL/CentOS 7.1 or 7.2 (64-bit)

\*\* Version 6.0.0 - controlled availability

\* Version 5.2.5 - withdrawn

## 1

# Introduction to Zenoss Core

---

This chapter provides a brief overview of Zenoss Core and its relationship with Control Center.

---

**Note** This guide supplements the *Control Center Planning Guide* and should be read in parallel with that guide.

---

## Zenoss Core and Control Center

---

Starting with release 5.0, Zenoss Core is deployed into a distributed architecture using Control Center. That is, Zenoss Core is an application whose installation and deployment configuration is managed by Control Center.

Control Center is an open-source, platform-as-a-service framework developed by Zenoss. Control Center and Zenoss Core are independent and unaware of each other, although Control Center is designed for the unique requirements of Zenoss Core. In particular, Zenoss Core and Control Center have a different version numbering scheme and different release schedule. Some features of Zenoss Core rely on specific capabilities of Control Center, so this guide includes a table of the tested combinations, [Tested operating environments](#) on page 6. A separate series of guides describes how to use Control Center, beginning with the *Control Center Planning Guide*.

In the Zenoss Core context, a resource is a device to monitor. Devices include compute, storage, network, converged infrastructure, applications, and unified communications systems. In the Control Center context, a resource is a physical or virtual host in a Control Center deployment.

## Key concepts

---

### master pool

A Control Center resource pool that contains only the Control Center master host. By isolating the master host in its own pool and configuring a ZooKeeper ensemble, Zenoss Core services are not affected when Control Center internal services are temporarily unavailable. The recommended name for this pool is `master`.

### Zenoss Core pool

A Control Center resource pool that runs Zenoss Core infrastructure services and other key services. This resource pool must be on the same subnet as the master pool. A Zenoss Core pool includes a minimum of two Control Center hosts. The recommended name is `Zenoss Core`.

## Deploying Zenoss Core

---

This chapter describes the considerations for adding Zenoss Core to a Control Center deployment.

### Recommended host configurations

---

Zenoss recommends that all production deployments include a minimum of three hosts, in two resource pools:

- One resource pool containing the Control Center master host.
- One resource pool containing two hosts, for Zenoss Core services.

The following table provides additional information about the resources required for hosts in the types of Control Center resource pools that a typical Zenoss Core deployment uses. For more information about pool types, see [Key concepts](#) on page 7. For more information about Control Center host requirements, refer to the *Control Center Planning Guide*.

Resource pool type	Host requirements		
	Count	Resources	Comments
Master pool	1	4 CPU cores 16GB main memory	The amount of storage required for application data varies greatly.
Zenoss Core pool	2+n	4 CPU cores 16GB main memory	More than two hosts is preferred, to support failover.

For a single-host deployment, Zenoss recommends a host with the following resources:

- 4 CPU cores
- 24GB main memory



## 3

## Packaging and distribution

---

This chapter describes how Control Center and Zenoss Core are packaged and distributed for on-premise installations.

### Packaging for customized installations

---

Beginning with Zenoss Core 5.3.0, Zenoss has implemented a change to release artifacts. Appliance artifacts remain the preferred option for installations and upgrades. If you choose not to use the appliance artifacts, a single set of artifacts with all components and prerequisites is available. New artifacts are no longer available from Docker Hub, and a Docker Hub account is no longer required to access Zenoss Core images.

Zenoss Core users can download the required files from the [Zenoss Community](#) site. For more information, refer to the *Control Center Installation Guide*.

The Control Center and Zenoss Core packages require approximately 5GB of storage space.

### Zenoss Service Dynamics virtual appliances

---

Zenoss Core is distributed as a pair of virtual appliances, one for a Control Center master host, and another for Control Center delegate hosts. Control Center and Zenoss Core are installed, the required Docker images are loaded into the local repository, and the latest supported version of CentOS is installed with all of the packages needed to begin using Zenoss Core as quickly as possible.

Virtual appliances are available as Open Virtual Appliance (OVA) and ISO disk image files, and their storage requirements vary by hypervisor (VMware vSphere or Microsoft Hyper-V) and role (Control Center master or delegate). For more information, refer to the *Zenoss Core Installation Guide*.

The Zenoss Core virtual appliances are available for download by all; no special permissions are required. For more information, refer to the *Zenoss Core Installation Guide*.