

# Content Engine Hangs After 3–4 Hours

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## Introduction

After a reload, the Content Engine caches for about three hours and then stops. Eventually, the cache is bypassed due to overload. This document describes a generic TCP/IP routing issue that significantly impacts the Internet Caches as they open connections to huge numbers of hosts in the public Internet.

## Prerequisites

### Requirements

There are no specific requirements for this document.

### Components Used

The information in this document is based on the Cisco Content Engine.

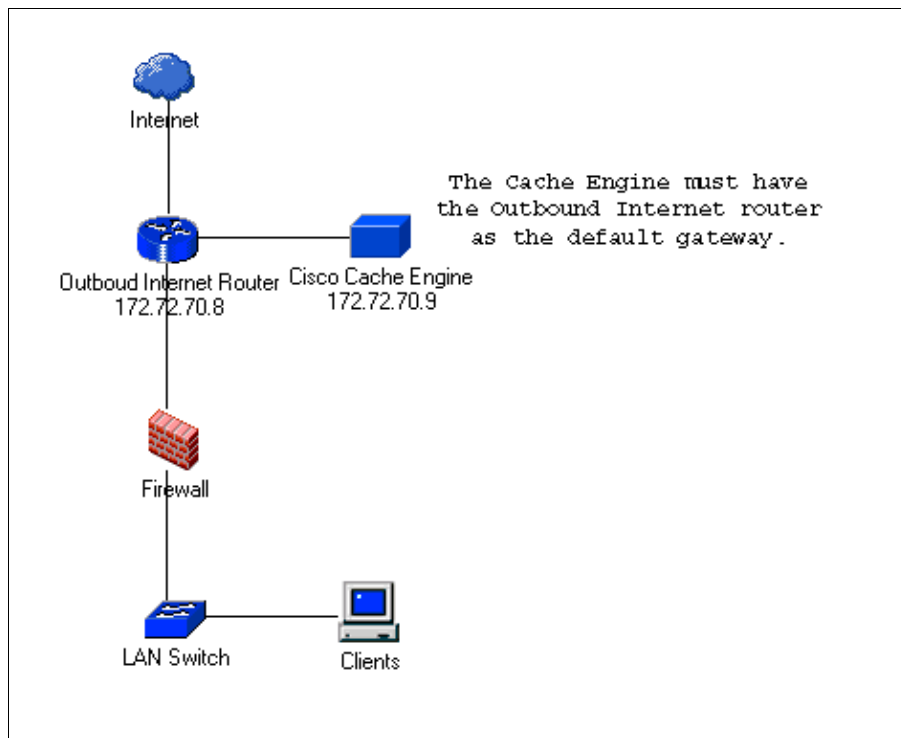
The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

### Conventions

Refer to the Cisco Technical Tips Conventions for information on document conventions.

### Network Diagram

This document uses this network setup:



## Problem

After a reload, the Content Engine caches for about three hours and then stops. Eventually, the cache is bypassed due to overload.

The problem as described happens if the cache is placed within the same IP subnet as the outbound Internet router, but it is configured not to use it as a default gateway. To check if this is the cause, issue the **show ip route** command on the cache after some minutes of operation. If routes are seen that were not configured, they are learned from ICMP redirect packets. Those routes are created for every host separately. After a period of time, the device consumes CPU resources in order to look up the routing table before any packets are sent out.

## Solution

This section describes the solution to this problem.

If this happened by misconfiguration of the default gateway, the solution is to apply the correct configuration on the cache. There may be a design requirement for this, if some Internet/internal sites are reachable via different routers in the segment or a dynamic routing protocol is used in order to determine the routes. The best solution for this case is to change the network design so that the cache appears on a separate subnet. If a Layer 3 switch is used, you can configure BVI in order to apply this solution.

In some situations, you can issue the **no ip redirects** command at the interface of router used as default gateway by the cache in order to disable the send function for the ICMP redirect packets. This solution must be carefully considered because it generally causes less efficient usage on the local network.

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## Related Information

- Cisco Application and Content Networking System (ACNS) Software ( registered customers only)
- Cisco Application and Content Networking System (ACNS) Software End-of-Sale Versions

**and Options**

- **Cisco Content Engine and CDN Hardware Datasheet**
  - **Technical Support & Documentation – Cisco Systems**
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