

# How to Use the route Command

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## Introduction

This document describes the use of the Microsoft Windows **route** command. You can modify this information when you troubleshoot the Cisco Intelligent Contact Management (ICM) software.

## Prerequisites

### Requirements

Cisco recommends that you have knowledge of these topics:

- How to troubleshoot Cisco ICM
- How to configure and troubleshoot TCP/IP
- How to troubleshoot Microsoft Windows

### Components Used

This document is not restricted to specific software and hardware versions.

- Microsoft Windows NT and 2000
- Cisco ICM

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 Cisco Technical Tips Conventions for more information on document conventions.

## Use the route Command

You can use the **route** command to view, add and delete routes on a Microsoft Windows NT server that runs Cisco ICM. You can use these options with the **route** command:

```
route [-f] [-p] [command [destination] [mask subnetmask] [gateway] [metric costmetric]]
```

## Command Options

This section explains each of the options that you can use with the **route** command.

- The **-f** option clears the routing tables of all gateway entries. If you use the **-f** option in conjunction with one of the commands, the tables are cleared before you run the command.
- By default, routes are not preserved when you restart the system. Use the **-p** option with the **add** command to make a route persistent. Use the **-p** option with the **print** command to view the list of registered persistent routes.
- The **command** option specifies one of the six commands in this table:

Command	Definition
<b>print</b>	Prints a route
<b>add</b>	Adds a route
<b>delete</b>	Deletes a route
<b>change</b>	Modifies an existing route
<b>destination</b>	Specifies the computer to send command
<b>mask subnetmask</b>	Specifies a subnet mask to be associated with this route entry (default subnet mask is 255.255.255.255)

- The **destination** specifies the network destination of the route. The destination can be an IP network address, an IP address for a host route, or a default route.
- A **netmask** is a 32-bit mask that you can use to divide an IP address into subnets and specify the available hosts in the network. If you do not specify a netmask the default value 255.255.255.255 applies.
- The **gateway** option specifies the default gateway. All symbolic names used for the destination or gateway are looked up in the network and computer name database files NETWORKS and HOSTS. If the command is **print** or **delete**, you can use wildcards for the destination and gateway, or you can omit the gateway.
- The **metric** option assigns an integer cost metric (that ranges from 1 to 9999) which you can use to calculate the fastest, most reliable, and least expensive routes.

**"IF"** specifies the interface index for the interface over which the destination is reachable. If you do not specify **IF**, an attempt is made to find the best interface for a given gateway.

Here is an example of the **route** command:

```

C:\WINNT\System32\cmd.exe
Microsoft(R) Windows NT(TM)
(C) Copyright 1985-1996 Microsoft Corp.

C:\>route print

Active Routes:

    Network Address          Netmask    Gateway Address  Interface    Metric
    0.0.0.0                  0.0.0.0    199.98.126.2    199.98.126.16  1
    38.208.233.0             255.255.255.0  199.98.126.2    199.98.126.16  1
    127.0.0.0                 255.0.0.0    127.0.0.1      127.0.0.1     1
    199.98.126.0             255.255.255.0  199.98.126.16  199.98.126.16  1
    199.98.126.16           255.255.255.255  127.0.0.1      127.0.0.1     1
    199.98.126.255         255.255.255.255  199.98.126.16  199.98.126.16  1
    224.0.0.0                224.0.0.0    199.98.126.16  199.98.126.16  1
    255.255.255.255        255.255.255.255  199.98.126.16  199.98.126.16  1

C:\>

```

## Examples

In order to view the entire contents of the IP routing table, issue the **route print** command.

In order to add a persistent route to the destination 10.19.0.0 with the subnet mask of 255.255.0.0 and the next hop address of 10.10.0.1, issue the **route -p add 10.19.0.0 mask 255.255.0.0 10.10.0.1** command.

In order to view the routes in the IP routing table that begin with "172.", issue the **route print 172.\*** command.

In order to delete all routes in the IP routing table that begin with "172.", issue the **route delete 172.\*** command.

```

Examples:

> route PRINT
> route ADD 157.0.0.0 MASK 255.0.0.0 157.55.80.1 METRIC 3 IF 2
      destination^      ^mask      ^gateway      metric^      Interface^
      If IF is not given, it tries to find the best interface for a given
      gateway.
> route PRINT
> route PRINT 157*      .... Only prints those matching 157*
> route DELETE 157.0.0.0
> route PRINT

```

## Related Information

- [Technical Support & Documentation – Cisco Systems](#)