



## Configuring Dial Backup with Dialer Profiles

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This chapter describes how to configure dialer interfaces, which can be configured as the logical intermediary between one or more physical interfaces and another physical interface that is to function as backup. It includes the following main sections:

- Dial Backup with Dialer Profiles Overview
- Dial Backup with Dialer Profiles Configuration Task List
- Dialer Profile for ISDN BRI Backing Up Two Leased Lines Example

For a complete description of the dial backup commands in this chapter, see the *Cisco IOS Dial Services Command Reference* publication. To locate documentation of other commands that appear in this chapter, use the command reference master index or search online.

### Dial Backup with Dialer Profiles Overview

A backup interface is an interface that stays idle until certain circumstances occur; then it is activated. Dialer interfaces can be configured to use a specific dialing pool; in turn, physical interfaces can be configured to belong to the same dialing pool.

See the section “Dialer Profile for ISDN BRI Backing Up Two Leased Lines Example” at the end of this chapter for a comprehensive example of a dial backup interface using dialer profiles. In the example, one BRI functions as backup to two serial lines, and can make calls to two different destinations.

### Dial Backup with Dialer Profiles Configuration Task List

To configure a dialer interface and a specific physical interface to function as backup to other physical interfaces, perform the tasks in the following sections:

- Configuring a Dialer Interface (Required)
- Configuring a Physical Interface to Function as Backup (Required)
- Configuring Interfaces to Use a Backup Interface (Required)

## Configuring a Dialer Interface

To configure the dialer interface that will be used as an intermediary between a physical interface that will function as backup interface and the interfaces that will use the backup, use the following commands beginning in global configuration mode:

	Command	Purpose
Step 1	<code>interface dialer <i>number</i></code>	Creates a dialer interface.
Step 2	<code>ip unnumbered loopback0</code>	Specifies IP unnumbered loopback.
Step 3	<code>encapsulation ppp</code>	Specifies PPP encapsulation.
Step 4	<code>dialer remote-name <i>username</i></code>	Specifies the Challenge Handshake Authentication Protocol (CHAP) authentication name of the remote router.
Step 5	<code>dialer string <i>dial-string</i></code>	Specifies the remote destination to call.
Step 6	<code>dialer pool <i>number</i></code>	Specifies the dialing pool to use for calls to this destination.
Step 7	<code>dialer-group <i>group-number</i></code>	Assigns the dialer interface to a dialer group.

## Configuring a Physical Interface to Function as Backup

To configure the physical interface that is to function as backup, use the following commands beginning in global configuration mode:

	Command	Purpose
Step 1	<code>interface <i>type number</i></code>	Specifies the interface.
Step 2	<code>encapsulation ppp</code>	Specifies PPP encapsulation.
Step 3	<code>dialer pool-member <i>number</i></code>	Makes the interface a member of the dialing pool that the dialer interface will use; make sure the <i>number</i> arguments have the same value.
Step 4	<code>ppp authentication chap</code>	Specifies CHAP authentication.

## Configuring Interfaces to Use a Backup Interface

To configure one or more interfaces to use a backup interface, use the following commands beginning in global configuration mode:

	Command	Purpose
Step 1	<code>interface <i>type number</i></code>	Specifies the interface to be backed up.
Step 2	<code>ip unnumbered loopback0</code>	Specifies IP unnumbered loopback.
Step 3	<code>backup interface dialer <i>number</i></code>	Specifies the backup interface.
Step 4	<code>backup delay <i>enable-delay disable-delay</i></code>	Specifies delay between the physical interface going down and the backup being enabled, and between the physical interface coming back up and the backup being disabled.

# Dialer Profile for ISDN BRI Backing Up Two Leased Lines Example

The following example shows the configuration of a site that backs up two leased lines using one BRI. Two dialer interfaces are defined. Each serial (leased line) interface is configured to use one of the dialer interfaces as a backup. Both of the dialer interfaces use dialer pool 1, which has physical interface BRI 0 as a member. Thus, physical interface BRI 0 can back up two different serial interfaces and can make calls to two different sites.

```
interface dialer0
 ip unnumbered loopback0
 encapsulation ppp
 dialer remote-name Remote0
 dialer pool 1
 dialer string 5551212
 dialer-group 1

interface dialer1
 ip unnumbered loopback0
 encapsulation ppp
 dialer remote-name Remote1
 dialer pool 1
 dialer string 5551234
 dialer-group 1

interface bri 0
 encapsulation PPP
 dialer pool-member 1
 ppp authentication chap

interface serial 0
 ip unnumbered loopback0
 backup interface dialer 0
 backup delay 5 10

interface serial 1
 ip unnumbered loopback0
 backup interface dialer1
 backup delay 5 10
```

