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Introducing Explorer Digital-Only Set-Tops

Overview

Introduction

System operators are migrating to a digital-only configuration to reclaim bandwidth from analog services and to offer improved picture quality. To support this new configuration, Cisco now offers the following digital-only set-tops:

- 1800tm
- 1840tm
- 3240HD™
- 3340тм
- 8240TM
- 8240HD™

Benefits

Digital-only set-tops provide benefits to both system operators and subscribers. System operators will get the following benefits from deploying digital-only settops:

- Increased available bandwidth for additional digital services
- Reduced operating costs
- Greater penetration of interactive applications and other digital services for sites that choose not to simulcast any analog channels

Note: In this configuration, subscribers with analog TVs will need a digital-only set-top to receive cable service.

Overview

Subscribers may notice the following benefits from using digital-only set-tops:

- Better picture quality
- Access to interactive applications and other digital services that had previously been unavailable for subscribers with cable-ready TVs
- More room for recordings on the digital video recorders (DVRs). The DVR can store more content because some programs are provided in a digital format that may require a lower data rate than the digital-analog set-top uses to encode analog video.

Purpose

This application note prepares you for the introduction of digital-only set-tops into your system. This application note also answers some questions you may have about migrating from a digital-analog environment to a digital-only environment.

Audience

System operators migrating from a mixed environment of digital-analog set-tops to a 100 percent digital environment should find the guidelines in this application note helpful for introducing the digital-only set-tops in their system.

To distinguish existing set-tops from digital-only set-tops, we refer to the existing set-tops as digital-analog set-tops in this document.

Related publications

Refer to the *Recommendation to Reduce SI Manager Processing Time Technical Bulletin* (part number 4010098) when migrating from a system that has both digital and analog channels to a system with a digital-only configuration.

Document version

This is the third release of this application note. This version includes the 1840 and the 3340 digital-only set-tops and provides more information on migrating from a digital-analog environment to a digital-only environment.

Frequently Asked Questions About Digital-Only Set-Tops

Introduction

This section answers the frequently asked questions about digital-only set-tops.

How Can You Identify Digital-Only Set-Tops?

To help your subscribers and installers easily distinguish the digital-only set-tops from other set-tops, the front panel of the set-top is clearly labeled with the model number. In addition, the label provided on the bottom of the set-top clearly states digital only as shown in the following illustration:



Can You Use Digital-Only Set-Tops in a Digital-Analog Environment?

Yes. But, in a digital-analog environment, the digital-only set-tops cannot display analog channels. On analog channels, subscribers will see a black screen and will not hear audio.

What Happens When a Digital-Only Set-Top Cannot Receive System Information?

Because these set-tops are 100 percent digital, if the set-top boots and is unable to receive system information (SI), the "advanced services are unavailable" barker appears. If the subscriber presses the INFO key, the "advanced services are still not available" barker appears. In the unlikely event of an extended system outage, subscribers who reboot their set-tops will be unable to watch any programs.

Is Special Software Needed?

Yes. To support the digital-only set-tops, set-top resource file version 93 or later must be used, and the following software must be installed depending upon the type of set-top you are using.

Platform	Software Needed
8240 and 8240HD	DVR 1.4.2 or later
3240HD	3250HD 1.4.0 or later
3340	OS 3.11.3.1/SARA 1.58.6.1 or later
1840	OS 3.11.3.1/SARA 1.58.6.1 or later
1800	OS 3.11.3.1/SARA 1.58.6.1 or later

Note: No HTML versions of code will be offered for digital-only set-tops.

Are New Troubleshooting Techniques Required?

Many of the techniques that you use to test a digital-only set-top are a sub-set of the techniques you already use when working with set-tops that tune both analog and digital channels. You will also need to rely more heavily on diagnostic tools and the diagnostic screens resident in the set-top than you did for digital-analog set-tops.

Is CVT Staging Affected?

No changes have been made for downloading software to a digital-only set-top. The current staging process is already a 100 percent digital process so CVT staging is unchanged.

Frequently Asked Questions About Migrating from a Digital-Analog Environment to a Digital-Only Environment

Introduction

This section answers the frequently asked questions about migrating from a digitalanalog environment to a digital-only environment.

Can My Existing Digital-Analog Set-Tops Operate in a Digital-Only Environment?

Yes. Your existing digital-analog set-tops can operate in a digital-only environment without any new software.

Are There EAS Message Configuration Changes?

Yes. Most digital-analog systems are currently configured to use an analog channel as the force-tune channel for emergency alert system (EAS) messages. If you have EAS events that use a configuration that force tunes the set-top to a particular channel, the channel that you tune to must be a *digital* channel that can display information about local and national emergencies.

For example, if you use an analog community access channel as the force-tune channel, you will need to digitize this channel with an encoder.

When You Convert From Analog Source Definitions to Digital Source Definitions Are There Specific Concerns?

Yes. Refer to the instructions in the *Recommendation to Reduce SI Manager Processing Time Technical Bulletin* to minimize the impact on your system during the time of the transition from analog to digital.

Can You Migrate from a Digital-Analog Environment to a Digital-Only Environment Without Affecting Scheduled Recordings?

Yes. Sites that convert source definitions from analog to digital as part of the migration from digital-analog to digital-only will not adversely affect scheduled recordings.

Are Scheduled Recordings Affected When You Migrate from a Digital-Analog Environment to a Digital-Only Environment?

No. In most cases, the future recordings are not affected by the change of a service from analog to digital. We have identified one corner case that results from moving the service to a new channel number that *does* require you to reschedule future recordings. Other changes (replacing a service with a new service on the same channel or changing the source definition from analog to digital) do not appear to affect future recordings.

Are Active Recordings or Live Viewing Affected When You Migrate from a Digital-Analog Environment to a Digital-Only Environment?

Yes. If the change occurs during an active recording or while a subscriber is watching live TV, it is likely that the recording of the stream or the display will stop at the time of the transition. Therefore, we recommend making this change during a program that subscribers are unlikely to be recording.

For Information

If You Have Questions

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.

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