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Need to create your own TV program guide listings?  
Need to edit existing TV program guide listings?  
Need to check consistency of your TV program guide listings?  
Need to automate TV program guide processing?

## Let Micus Interactive Program Guide Editor do the work

**IPG Quality Control Utility Version 1.7.0**

Edit Discrepancies  
 Edit Schedule  
 Edit Titles  
 Edit Descriptions  
 Edit PPV Programs  
 Clear Empty Fields

Create Discrepancy Report  
 View Discrepancy Reports  
 Create Schedule Report  
 View Schedule Reports  
 View Daily Reports

Process New Files  
 Save To Todays Guide  
 Create Files  
 FTP Files  
 View File Reports

View Today's Guide  
Time: \_\_\_\_\_  
Channel: \_\_\_\_\_  
Load

Archive Files Delete Files Delete Records Rep

**View New Description**

Dr. Strangelove

(1964) President, advisers act as bombers head toward Moscow. Peter Sellers, George

09:00 - 10:35 PM

Press GO E

Edit Title Edit Description

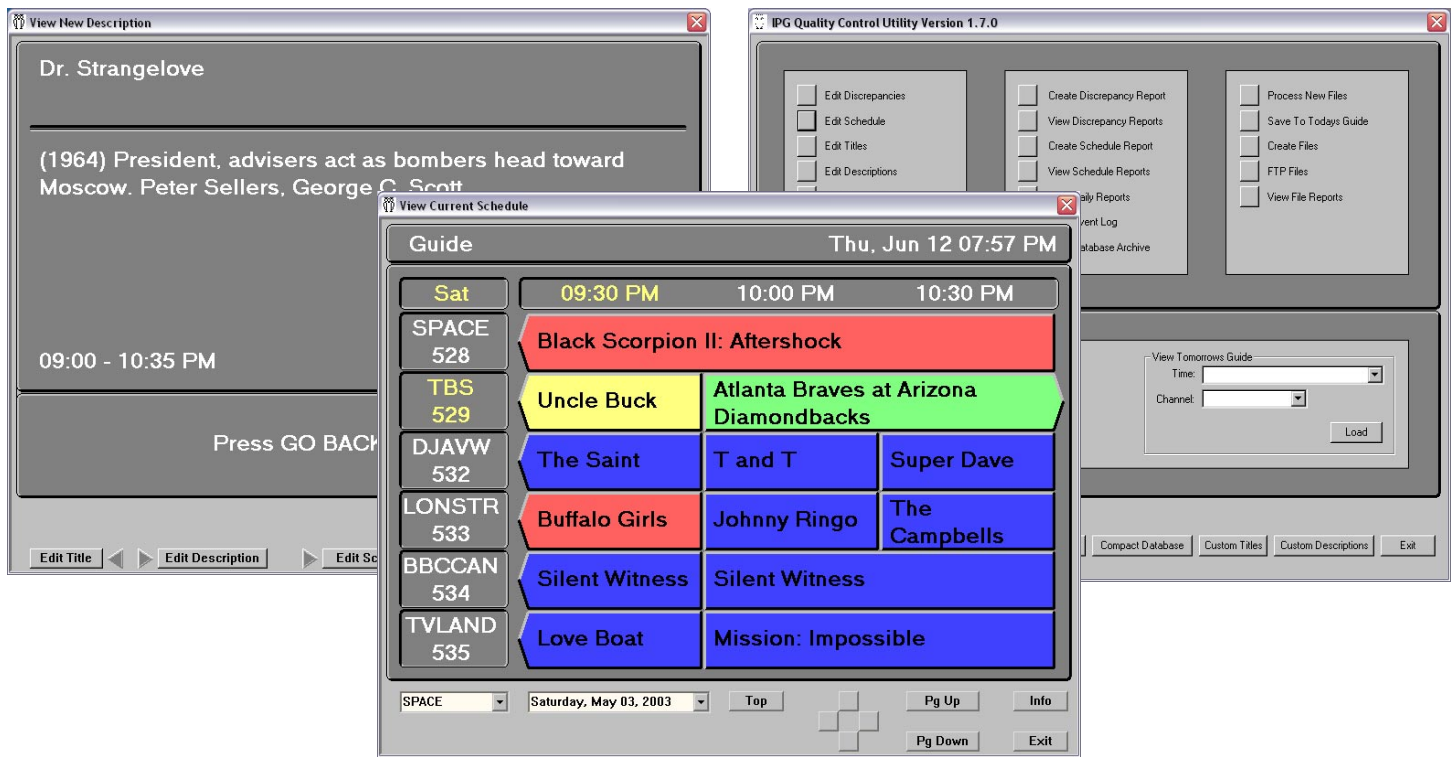
**View Current Schedule**

Guide Thu, Jun 12 07:57 PM

	09:30 PM	10:00 PM	10:30 PM
SPACE 528	Black Scorpion II: Aftershock		
TBS 529	Uncle Buck	Atlanta Braves at Arizona Diamondbacks	
DJAWW 532	The Saint	T and T	Super Dave
LONSTR 533	Buffalo Girls	Johnny Ringo	The Campbells
BBCCAN 534	Silent Witness		Silent Witness
TVLAND 535	Love Boat	Mission: Impossible	

SPACE Saturday, May 03, 2003 Top Pg Up Info Pg Down Exit

- Creates and edits TV program guide listings
- Checks TV program guide consistency
- Supports any number of TV channels
- Automatically executes daily tasks
- Mimics the screens that end-users see on their TV sets
- Uploads TV program guide to the broadcast center
- Generates a variety of predefined and custom reports
- Automatically emails reports to the personnel responsible for the service



## The Task

Digital TV viewers receive their TV programs using digital receivers connected to their TV sets. Part of a digital receiver feature set is the *Interactive Program Guide* (IPG). IPG is a set of interactive screens that users can display on their TV sets. Using the remote control, viewers can browse through the program listings for the current day and for a few days in advance.

Digital receivers get IPG contents via satellite or cable from the broadcast control center. The control center in turn receives details on TV listings from the service provider that creates TV programs.

Whenever a television program is scheduled for broadcasting on digital TV, its title and a description of its contents and features are listed in a file that contains programming details for one or more TV channels. Prior to scheduled broadcast times, these files are downloaded to the control center and processed by the *IPG Translator*. The IPG translator is a computer-based system that sends the listings via satellite or cable to the customers.

Usually, service provider creates TV listings as spreadsheets. When you receive them, you may need to convert them into the file format required by the IPG Translator.

Spreadsheets frequently contain errors, such as overlapping events, missing titles and descriptions, missing or invalid ratings, and so on. These errors are highly visible to the customers, and must be corrected.

At times, you may need to modify TV listings by rescheduling show times, or replacing already scheduled events with other events. You may need to change event ratings and other attributes, such as event category, price, audio, video, and so on.

From time to time you may need to insert into the schedule a new event, such as a live sport coverage.

Finally, you may want to produce your own TV listings in a format compatible with the IPG translator and download your listings to the broadcast control center.

## The Solution

As a solution to automating all of your program guide related tasks, we offer the *Interactive Program Guide Editor*. This product specifically addresses issues such as: loading TV listings from the spreadsheets, automatically detecting and reporting various errors, editing scheduled events, inserting new events in the schedule, creating new TV listings and generating various reports.

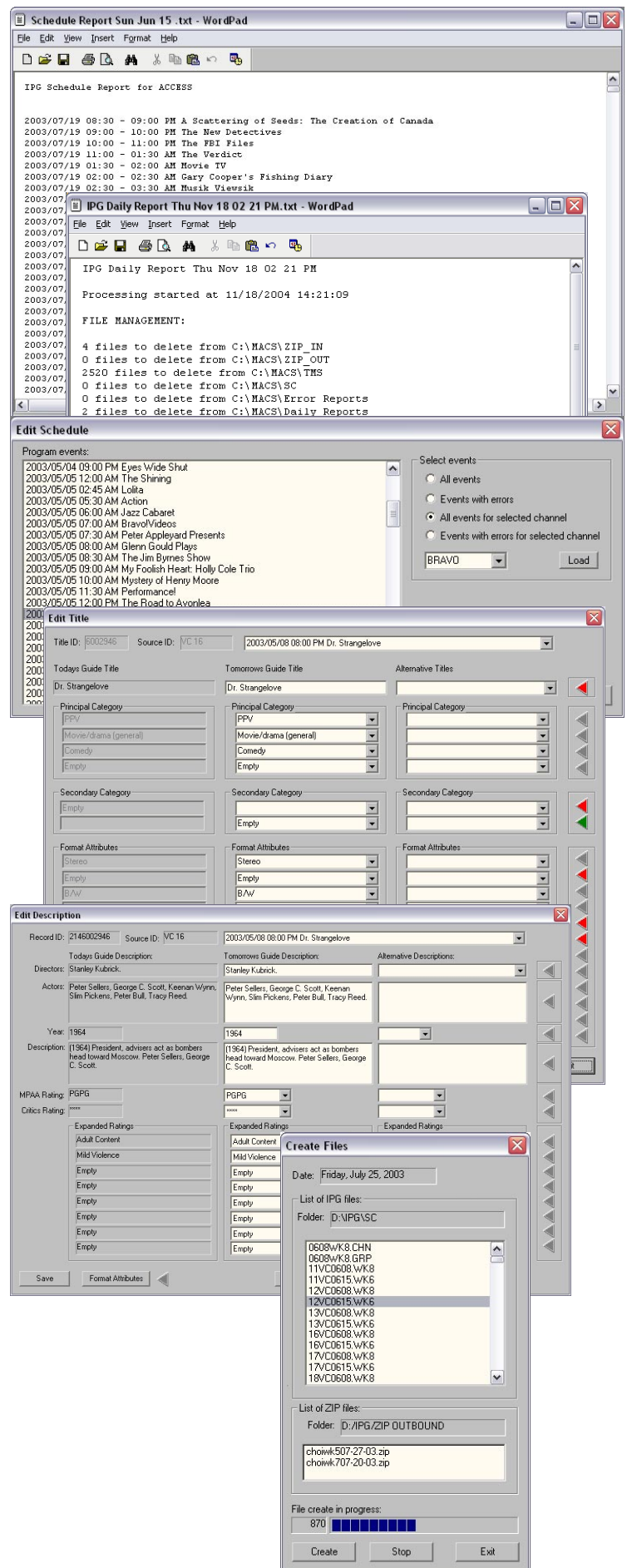
Interactive Program Guide Editor is fully compatible with other Micus Real Time Software Inc. products, such as *Business Television Broadcast Scheduler (BTBS)*, *Micus Alarm and Control System (MACS)* and *Trouble Ticketing System (TTS)*.

Various organizations have different requirements regarding their TV listings, and use variety of file formats to manage them. Our Interactive Program Guide Editor is highly modular and designed for rapid customization to address your specific TV listings format.

Similarly, service providers use different equipment in their broadcast centers. Typically, such equipment requires specific file formats in which they accept TV listings. Again, we designed our product in a way that facilitates easy customization to meet specific requirements.

## Key Features:

- Automatically downloads TV listing spreadsheets from a predefined location and at predefined time on a daily basis.
- Automatically parses spreadsheets that contain TV listings and updates its database accordingly.
- Automatically runs a consistency check and lists all discrepancies and errors found in TV listings.
- Automatically generates processing reports, which contain processing statistics and a list of detected errors.
- Emails processing reports to a list of individuals responsible for the service.
- Provides a user friendly and intuitive *Graphical User Interface (GUI)*, which allows you to view and correct errors and discrepancies, such as overlapping events, missing titles and descriptions, invalid program categories, ratings and attributes.
- Edit tool allows you to edit already scheduled programming events, or to insert new events.
- View tool provides a mimic that resembles screens that customers see on their TV sets.
- Creates TV listing files in a format required by the IPG translator.
- Downloads TV listing files to the IPG translator.
- Supports multi-user access over a TCP/IP network.
- Reports all status changes and alarms to the user interface clients and saves them into the event log files.
- Provides a set of configuration screens, which allow you to configure the server, a list of TV channels, ratings, program categories, upload and download sites and other configurable parameters.
- Creates variety of reports, either automatically or upon operator's request.
- Provides a set of archive commands to manage files and database records.



## SERVER FEATURES

The server automatically downloads TV listing spreadsheets on a daily basis, parses them and updates its database accordingly. The same spreadsheet can be used to insert new programming events and to update events already in the server database.

Once the new listings are added and the existing ones are updated, the server checks the consistency of the newly loaded information. It looks for overlapping events, missing titles and descriptions, invalid or missing ratings and categories, invalid program attributes and so on. The results are saved into a daily processing report and emailed to a list of personnel responsible for the service.

Once a day the server executes a list of housekeeping tasks, such as deleting obsolete files, database records and reports.

## USER INTERFACE FEATURES

The *Graphical User Interface (GUI)* provides access to all editing, file management, report generation and housekeeping commands.

### EDIT TOOL

Editing commands are grouped together into a command set referred to as the *Edit Tool*. The Edit Tool allows you to edit titles and descriptions, to correct errors and discrepancies, to edit the schedule and to insert new programming events, titles and descriptions.

### VIEW TOOL

The GUI also provides a set of commands to mimic screens that customers see on their TV sets. These commands are grouped into a set referred to as the *View Tool*. You can navigate the program guide using the mouse and a set of on-screen push buttons that resemble the remote control. You can select an event and open its description screen to see details. From the description screen you can open screens to edit the selected event title and description.

### FILE PROCESSING

Commands to process existing and create new TV listings allow you to manually load a new set of TV listing spreadsheets, to create a new set of output files, and to upload the files to the IPG translator.

### REPORTS

Interactive Program Guide Editor generates a number of reports. Some of these reports are generated automatically by the server, while others are created upon operators request. Some reports always have the same format, while others allow operators to select report columns, channels and time range. The GUI provides a set of commands to view and to manage report files.

Commands to create and view reports allow you to view daily processing reports, to view outstanding errors and discrepancies, to create and view schedule report for the selected TV channel, and to view the event log.

## CONFIGURATION AND HOUSEKEEPING

The GUI offers a rich set of housekeeping commands. These commands are used to manage your database, and to archive and delete files.

Configuration commands are implemented as a separate configuration utility program. These commands allow you to setup your server, to define your list of TV channels, to configure your download and upload sites, and to select a number of other field-configurable options.

### EVENT LOG MANAGEMENT

All event reports are stored into log files. This feature allows you to analyse the recorded actions taken by the system, changes in status and detected alarm conditions. The server automatically creates and maintains log files on a daily basis.

### MULTIUSER SUPPORT

Interactive Program Guide Editor is a multiuser system. Any number of users can edit TV listings, or perform various control and configuration tasks concurrently. Each instance of the user interface is a completely independent program which may run on any computer on the TCP/IP network.

### NETWORKING AND REMOTE ACCESS

Interactive Program Guide Editor provides full LAN and WAN support. The system may be configured to use any physical network topology as long as TCP/IP protocol is available for that network. Therefore, the system may run on Ethernet networks, and across wide area networks. In addition, clients may use Remote Access Service (RAS) to communicate using TCP/IP over dial-up serial lines.

### ON-LINE DIAGNOSTICS

The server has powerful built-in real time on-line diagnostics which can be used in the field to verify system configuration and to monitor operation of the external interfaces.

On-line diagnostics can be accessed remotely by our customer support personnel, to assist operators in configuring and running the system.