



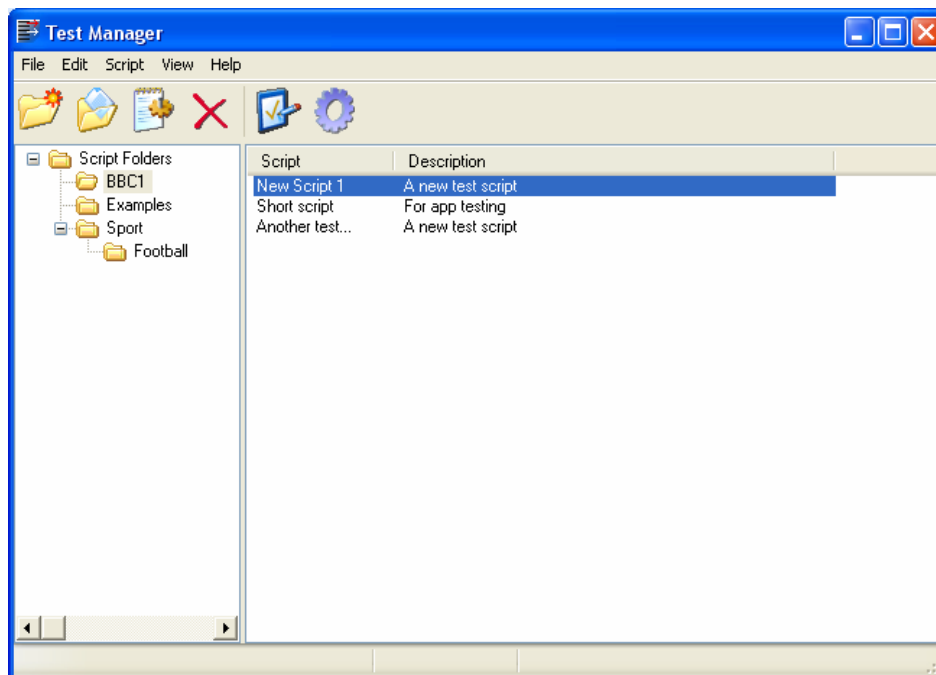
TestManager Overview

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Introduction

TestManager is an application to support automated testing of consumer electronics equipment and interactive, digital television services. Building on the ability to output infrared remote control signals via the USB *RedRat3* and/or the networked *irNetBox*, TestManager provides a comprehensive set of features to support system testing.



Application Features

1. On-Screen Remote Control

An on-screen remote control gives the user an intuitive method of performing simple control operations, sending IR signals to any selected set of IR outputs.

2. Zoning

Any number of zones can be created, each made up from a set of IR outputs. Zones can then be used with the on-screen remote control or in scripts.

3. Named Operations

A given named operation such as *BBC1* or *Engineering Channel* may require different remote control signal sequences on different set-top boxes (STBs) to accomplish the same end. For example, BBC1 on one STB may be 101 but on another STB just 01.

TestManager allows the user to create *named operations* that can be configured to send the appropriate set of IR signals to each STB to for that operation.



3. Scripting

A script is a set of steps that would be taken with a remote control to accomplish a certain task, for example navigating through an interactive TV menu to view local weather information, for example:

```
select DTT
send 1
wait 10
send text
wait 15
send red
wait 3
send green
wait 3
send yellow
wait 3
send blue
wait 3
send down
wait 1
send down
...
```

Scripts can operate on zones, use named operations and call other scripts. Looping constructs allow repeated execution of sections of a script.

4. Data Storage and Sharing

All application configuration data is stored in a relational database to support multiple users. TestManager can be used by an engineer at their desk to create and validate scripts in preparation for use in the testing facility.

5. Logging

All TestManager IR signal output operations can be logged so that where an unexpected response is detected from a device under test, the exact sequence of operations can be analyzed.

Technical Information

- Requires Microsoft Windows 2000 or XP.
- Written in C# using the Microsoft .NET Framework V1.1.
- The relational database backend is the free Microsoft SQL Server Desktop Engine (MSDE). It supports up to 5 concurrent users, however if it is necessary to support more users working with the system simultaneously, a full version of SQL Server can be purchased.
- Infrared remote control output can be via either the USB RedRat3 or the networked irNetBox.