SYSTEM FOR THE CREATION OF THE TELEVISION WEATHER FORECAST



Why MetTV 3?

Cuban Island, located in the path of cyclones and hurricanes formed in the Atlantic Basin, has often been hit by these phenomena, causing damage to its population and harming the economy. Cuban people has acquired the habit to keep it informed on the weather due to the continued appearance of these contingencies, and already own a wide culture that demands quality of information that is offered by all media. Given this need, four specialists of the informatics team of the Provincial Meteorological Center of Cienfuegos, with more than eight years in the development of these systems, created the MetTV3 to help people to be prepared for any weather situation.





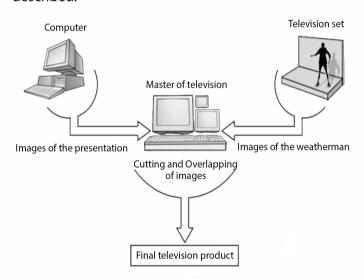
System Description

Generalities

Cuba has a system of telecentres, located in most provinces, responsible for transmitting a series of programs, which includes the kind of information that privileges the weather theme.

To achieve the required quality, a very specific television technology is used that provides the means for recording, editing and airing of programs. One of the most important stages of this process takes place at the master, where the montage of images for weather information product is made.

The presenter responsible for issuing the weather forecast is located in a set which backplane is covered with a blue cloth that creates a homogeneous background color. The presentation filmed with conventional cameras is received in the television master and through a cutting technique the blue background is removed and the image of the presenter is overlapped to the weather presentation, which is executed in parallel on a personal computer. This computer has a video card that sends images to the television master and performs the process previously described.



The meteorologist has a real-time reference by a television placed on the set, so that the result of the cut and overlap can be observed and serves as a guide for its gestures and movements precisely coincide with the images of the weather presentation.

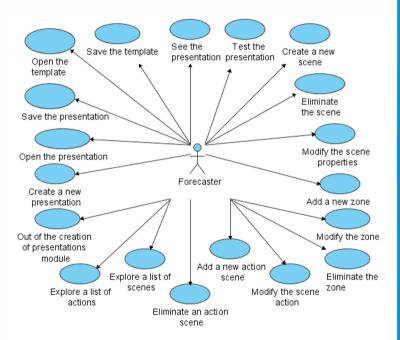
This material has been made in the framework of the project: "Improvement of the hydro-meteorological Early Warning Systems to increase disaster preparedness and to reduce vulnerability of the population living in the affected provinces by Hurricane Sandy (Cuba)"; implemented by the United Nations Development Programme (UNDP); under the Action Plan for the Caribbean from the European Commission's Disaster-Preparedness Programme (DIPECHO).

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Features and benefits

MetTV3 is a system specialized on the weather forecast television presentation, derived from the daily conformed forecast.

Its main function is to display the weather information perfectly compatible with digital television (technology being currently introduced in Cuba). The information can be displayed with a high degree of realism and definition by MetTV3, due to its latest technology of three-dimensional graphics. Furthermore, the use of methodologies contained in the manuals of television forecast enables viewers to receive the information more directly. The developed tools also enable to faithfully show any relief of the planet, by only inserting the data previously.



Description of the system model

The system consists of two modules. The first is devoted to television presentation and consists of three parts:

- Interface for creating the television presentation, where the presentation is structured with all its elements: images, animations, qualitative and quantitative data.
- Interface to manage the maps (mapmaker sub-module).
- Interface for managing template files for the television presentation.

The second module uses the data file prepared by the presentation designer, and is used to display the information product.

This module has two parts:

- Interface of script reading obtained by the designer of the presentations.
- Displaying the television presentation.

Actors of the system model

An actor is who interacts with the system without being part of it, and can assume the role played by one or more persons, a team or an automated system.

The actors of the proposed system are defined as follow:

Actors of the creation of presentations module

Name of the actor	Description
Forecaster	It is the actor who creates the weather presentation on television. He has the access to all functional requirements of this module.

Actors of the displaying of presentations module

Name of the actor	Descripción
Meteorologist	It is the actor who explains the weather television presentation and controls the presentation progress. He has the access to all functional requirements of this module.

MetTV3

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