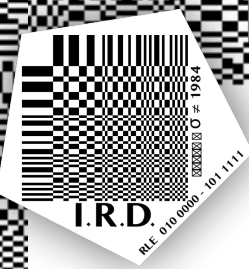


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CERTIFICATION!

# iRD Resolution Challenge



The *institutions of Resolution Disputes*, in short iRD, are geared towards demonstrating the fact that resolutions are more than just standards. Resolutions form solutions but also involve compromises between different matters. However, these compromises and their inherent alternative outcomes are often obfuscated or even forgotten.

For example: when we speak about video, we refer to a four cornered moving image; we do not consider video with more or less corners, timelines, or soundtracks. Fonts are monochrome, QWERTYUI is a classic password, Ghosts can only communicate through analogue forms of noise and animals cannot own copyright.

All these standards have political, economical, technological and cultural backgrounds, that are somehow embedded in the histories of our media. Its hard to keep up with them and of course, we cannot collect them all. But it is a good exercise to consider these mechanics once in a while and to realize that with every resolution, alternative implementations will be unthought, forgotten or even lost and unseen.

There are no "right" answers and no amount of questions to answer in the "good" way to get certified. You can propose your answer directly at the iRD via email, or present them via the piratepad links available in the pdf. A resolution is just a perspective!

This test was compiled with the generous help of the R.C.R.D. (Resolution Challenge Research + Development) Team consisting of Laimonas Zakas, Daniel Temkin, Stallio!, Phil Stearns, Rick Silva, Jon Satrom, Daniel Rourke, Raquel Meyers, Rosa Menkman, Kyle McDonald, Jan Robert Leege, Olia Lialina, Justin Harvey, Anders Carlsson, Carolyn Kane and Nick Briz. Questions, additions and fulfilled challenges can be send to [iRD@beyondresolution.info](mailto:iRD@beyondresolution.info)

## Pixels

■ What is the shape of a pixel?

## Color

■ What different color schemes can you name?

■ What colors are the most concentrated in video technology and what colors is the human eye most sensitive to?

## Storage

■ The *File* is a resource concept for storing information on our computers, which alternative information storing paradigm do you prefer and why?

## Text

■ What is the difference between character encoding and a font?

■ Can a text file mimic a pixel-based image to look exactly the same?

■ Name as many computer-related character encoding standards as you can.

■ How many colors does Unicode use?

■ Which is the current version of Unicode and how many characters does it have?

■ How many times is the widest Unicode character wider than a latin letter 'a'?

■ How many emoticons have active patents?

■ How many characters does a shortened Twitter link currently require?

## Hardware

■ Please organize the following media in size from small to large: SD, USB stick, floppy, HD, 3.5"

■ What is the difference between hardware and software?

## Programming

■ Besides text-based programming, name one other kind of programming.

■ How is JavaScript related to Java?

■ What programming language has the fewest commands?

■ How does one write code in the passive-aggressive style?

■ In how many coding languages can you write a comment?

## Affordances

■ How long does it take a packet of data to travel from US to Europe and back?

■ How long does it take your CPU to execute a single instruction?

## Random not Random

■ What is the relationship between recursion algorithms and feedback systems?

What is the relationship between feedback systems and fractals?

### Sound

What is the difference between sound and video?

What is the maximum frequency of most compressed audio codecs?

### Moving Image

How many corners does a video have?

What is theoretically the max. resolution of analog video

What standard definition broadcast formats can you name?

What is the difference between a screen, an aspect ratio and a resolution?

What aspect ratios can you name?

Please put these screens in the right order: CRT - Plasma - LCD - LED

Please organize these compression based on if they are lossy and lossless (BMP, JPEG, RAW, PNG, GIF)

How many line based artifacts can you name?

What is the difference between 4:4:4, 4:2:2, 4:2:0 video signal? What properties of human physiology do these signal types leverage?

How do data rate and compression relate to one another?

Who posed for the creation of the photoshop model, the JPEG compression model and the gif model?

In the video codec wars of the 2010's, which browser company backed which video technology?

(draw the right connection)

Google

Mozilla

Apple

Microsoft

Adobe

Opera

OggVorbis

HAP

Flash

HTML5

WebM

H264

Closed captioning is to open captioning as:

- Optical audio tracks baked into film stock
- Separate audio track synced to a visual track
- A word processor is to a grave stone

Temporal compression is to lossless compression as:

- tempura shrimp is to onion rings
- pudding is to Muybridge
- an organism with eyes in the front and back of it's head able to see through time is to a car

### Internet

A stupid network is:

- free network
- slow network
- neutral network

The first cross platform browser was:

- WWW
- Mosaic
- Netscape
- Internet Explorer

### Animals

What animal only exists on the internet?

### The Sun

How many lumens does the Sun emit?