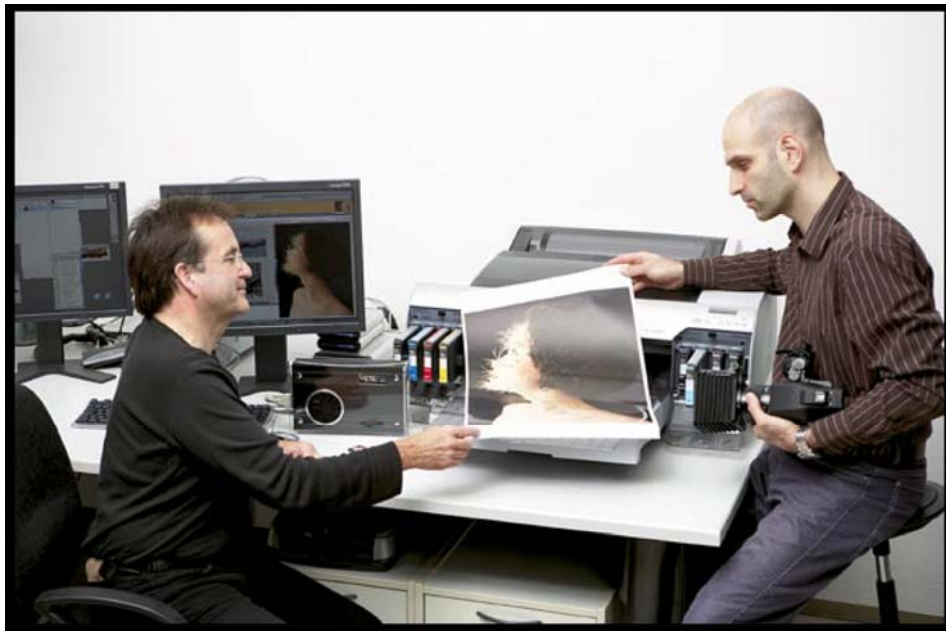


# TECHNOLOGY



Photographer Olf Appold (right) and the boss of Instant Data, Frank Gerlinger, during proofing with CromaBase.

## Digital Image Management 4 U

### CROMABASE: ONLINE PLATFORM FOR IMAGE PRODUCTION

Pre-press stage online: With CromaBase, the Hamburg company Instant Data wants to release photographers and agencies from time-consuming tasks such as color correct data processing, image archiving and data transfer. Profifoto tried out the service

Nowadays, the digital photographer has to devote his time to many kinds of tasks that are anything but creative: color management and profiling, former pre-press tasks such as scaling photos to print size or color, contrast and focus corrections. Furthermore, if at all possible, he has to ensure that the fruits of his labor reach their destination since, in the customer's opinion, this is child's play

thanks to ISDN and email. He is also encumbered with the administration and archiving of his work results. In short, many photographers today feel more like a system administrator and data warehouse specialist than a creative individual. This not only comes into the conflict with the way professional photographers have always seen themselves, but it also makes little sense from the point of view of time and money. The photographer is, ideally, a highly paid

specialist for taking pictures. Just like it makes no sense for the surgeon to clean the floor of the operating room or to wheel the patient back to the ward after the operation and tuck him up in bed, why should the photographer have to occupy himself with the peripheral phenomena of his activities instead of concentrating fully on his actual job? The changes brought about by the digital revolution in photography do not of course stop at the camera, but also have an effect on the photographer's working environment. Be it in the traditional photo laboratory, that suddenly has to cope with completely new concepts for image output, be it in the advertising agency commissioned or in the customer's company. The new technology requires new processes and if these are to run in a controlled fashion, in the sense of quality assurance, the complexity quickly increases considerably.

### **GETTING COLORS MANAGED**

It is precisely here that the CromaBase concept of the Hamburg enterprise Instant Data begins. Instant Data's boss, Frank Gerlinger, likes to compare the business model with that of mobile telephony – however, a comparison with a bank account would be more appropriate. The photographer makes a "deposit" by uploading his pictures. He can then "transfer" these not only to different customers, but also to his own website or to a photo agency. He can also change his image data to another "currency", such as paper prints or DVDs and, of course, make a "withdrawal" himself at any time. But, in the most important point, the comparison with the mobile phone and the bank account does not apply - CromaBase goes far beyond simply managing a photographer's treasure trove of digital images since it stands for total control of color processing.

This involves utilizing the latest color management technology on the basis of ICC profiles. Although this is not entirely new and can also be done today with a lot of cheap software. But to do this successfully, you still need a high level of expertise, which is not always available on account of lack of relevant training courses. Moreover, profiling digital input and output devices requires a lot of care – and money. Nowadays, you can also make a lot of terrible mistakes.



The optional CromaBox supports the workflow thanks to high-performance hardware

Job, film, image: the structure of the CromaBase database works with well-known concepts

When the images are uploaded, the folder structure is displayed – the software generates thumbnails automatically

The Hamburg advertising agency, Scholz & Friends NeuMarkt, is just one of the well-known companies that use the services offered by CromaBase. The agency uses the system for all the photo jobs for one of its own major customers - Tchibo. And, as the CEO Sven Jarck explained to Profifoto, it is not just a few photos of coffee beans since focus is on the non-food range: "We are talking about approximately 3,500 images for the packaging and far more than 10,000 images for the magazines for this customer alone every year." The photographers, Scholz & Friends NeuMarkt, Tchibo and the pre-press professionals use CromaBase for every single Tchibo photo, from the package design and the shop poster to the catalog that appears every week. The art director stores the images selected as well as alternatives in the CromaBase presentation module and lets the customer have access to the online "folder" by timer control exactly on the day agreed. The customer makes his decision and then releases the data for production. CromaBase then prepares the image data for the target color model defined and lets the lithographer also have online access. It goes without saying that the workflow is virtually 100 percent digital. Jarck: "I cannot remember one single analog picture being taken recently." It is even more important for the agency that a fully calibrated work process has been successfully set up at the agency and at the customer's company. Moreover, the customer is now equipped with the appropriate monitors. Some of the shots are taken in the studio, while others are taken on location - and this is often on far-off shores, as was the case recently for a fashion shooting in



Sven Jarck, CEO of Scholz & Friends NeuMarkt

Cape Town. When it comes to the allocation of tasks, Scholz & Friends NeuMarkt holds an interesting view: "Downsampling data, generating lithographic data, archiving and administration - all this work is actually done in the pre-press stage," explained Jarck. "We are an advertising agency and although we have the tools and the expertise to do this, our strength is in the creative process. CromaBase reflects exactly this allocation of work." Even though this is a high-performance system, it is so foolproof and easy to operate that errors can be avoided and there is no need for long periods of training for the various photographers who work for Scholz & Friends. "The change-over to CromaBase took place from one production to the next without any problems," Jarck reported. Even if external archiving does not reduce costs directly, the higher production capacity and greater flexibility in terms of timing give the agency a competitive edge that is of benefit to both the customer and the agency. But a



Fashion shooting for Tchibo in Cape Town, image data in Hamburg: S&F-branded CromaBase version

platform like CromaBase can not only be of service to large producers in the image business. Olff Appold, for example, (see Portfolio in ProfiFoto ??/2003) has been using the service for several months to produce catalogs on jewelry: "I save a lot of time every day and my digital productions are very popular with my customers. The fact that you can produce contract proofs immediately in the studio is a great benefit," he said summarizing the advantages of his application scenario. Instant Data had integrated a special proofing module in the form of RIP hardware for him, which outputs the data from CromaBase on an Epson 4000 including UGRA/FOGRA media wedge cmyk.

## STRUCTURE IN DATA CHAOS

Therefore, CromaBase views itself as an online service platform, that structures the entire workflow and production process: "People working on the single work phases are induced to use color management. The image data is at this point in a color model described by the ICC profiles," is the promise. This is achieved by the color model being automatically transformed as required into the appropriate color model in Windows on the high-performance CromaBase servers during transfer.

## **THE CROMABASE PRINCIPLE**

All the photographer needs at the shooting location (or in the nearby hotel, where the results of the day's work can be viewed) is an Internet connection. The typical procedure with CromaBase is that after the shooting the photographer, or his assistant, loads the home page of the CromaBase server (situated in Hamburg) in a normal Web browser. The photographer, who has already made a rough selection, logs into the system with his access data. Depending on the performance of the Internet connection, he will then load the fine data or, if it is a slow connection, first of all only the previews of his photos into the system in an informative and layoutable size. The image database for this is categorized in "Jobs" and "Films". Each job can consist of any number of films - each film in turn of any number of shots. Once the jobs and films have been created and given informative names, the photographer can begin uploading. At present, CromaBase only processes TIFF and JPEG formats. At the moment, a raw data converter on the basis of Phase One's ever-popular CaptureOne is however just being developed. In our test, uploading turned out to be child's play. The first time, the user has to download and install a small program which automatically starts when uploading takes place in future. It displays the folder structure of the computer and small thumbnails are automatically generated when the mouse is moved over the file name of an image. If no ICC profile is integrated in the image (not all digital cameras can do this during a shooting), you select the desired color profile from a drop-down list - and this is where it begins to get interesting. In addition to standard profiles, you can store as many profiles of your own as you wish - or of

course, profiles provided by your customer. For example, if the photographer takes photos for the magazine "Schöner Wohnen" (Attractive Living), he simply downloads the ICC profile required for intaglio printing at the publisher's Gruner + Jahr and as a result enables CromaBase to subsequently supply the images with this profile. Whether the shooting location is just a few blocks away or at the other end of the world, the customer or the agency can see the photos in real time - and not just any old quality, but contract proof quality. Depending on the computer platform used, you can choose between LStar RGB if you wish to display your images in contract proof quality on a Mac with Safari or sRGB for people using Internet Explorers under Windows.

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This involves the Mac displaying the images in genuine contract proof quality - that is provided the monitor is correctly calibrated. Under Windows, contract proof quality is only possible following a color model transformation to sRGB. To achieve this, CromaBase uses the engine from ColorSolutions, which also appears on the market as a product line called BasicColor.

## **WITHDRAWING IMAGES**

Meanwhile, the customer can begin with the layout without any delay or - if required - can place additional orders right away. If the fine data has been set up at the other end of the line, then the profiled data can flow into the print process. In our test, we operated with fine data and were pleased to see that the CromaBase server achieved good results thanks to its obviously well-dimensioned network connection. Those people who choose to download the JPEG version with maximum image quality from the

photographer's fine data archive will have a selection of images in the form of a 50 MB zip archive on their hard discs in under 5 minutes, even with a slow DSL connection. This means that even the most critical eyes will not be able to see the slightest difference to an uncompressed, but infinitely larger TIFF format. The upload is generally much slower, depending on the DSL connection, meaning that the fine data workflow at the shooting location is only a realistic option if the Internet connection is exceptionally fast – ISDN or even modem connections should not be used for normal productions. A further option is the so-called CromaBox - a small barebones computer which can toggle between cameras or image data memory and the online connection with CromaBase and which makes handling even easier especially if there are a large number of images, by automating the rough data/fine data handling. But even without CromaBox, such a workflow saves time and costs. Frank Gerlinger estimates that on a normal day's fashion shooting, between six and eight hours can be saved, i.e. the time required for developing raw data, burning DVDs, ordering a courier, etc.

### **COSTS**

Now let's continue with the comparison with a bank account - the costs consist of charges for your account and transfers. A normal CromaBase customer initially pays a monthly basic fee of EUR 50. There is a charge of 20 cents for each megabyte of images uploaded. In other words, if you load a 10-MB image file into your CromaBase account, you pay EUR 2. This includes the entire service and, what is more, long-term archiving. If you are a customer, then there is no limit to the length of storage. If the photographer downloads his photos at a later date, there are no further costs. If the

photographer's customer downloads the images, the same fees are charged as for uploading depending on the volume. In addition, the photographer can also use some of his archived images on his own homepage, order copies of his photos on paper in all possible sizes from linked photo laboratories, have images burnt on DVDs by linked service providers or - a very special feature – sell his images via well-known photo agencies. Ullstein Bild has already been included and Frank Gerlinger is at present negotiating with Mauritius. The CromaBase photographer can set up any number of further users, e.g. art directors, customers or staff at the printer's, and assign them certain rights to use his images

### **SUMMING UP**

Thanks to perfect knowledge of the market, production processes and their problems, the founders of CromaBase have devised a service that could take the weight off the shoulders of many photographers. Moreover, they are establishing a national and international network of services through collaborations, supported by fast dedicated lines, with photo laboratories, rental studios (the head office is located close to Hamburg's Briese studios) and typical shooting locations to enable flexible productions at more and more locations. The test showed that the technologies and Web interfaces used were of the highest standards, both technically and ergonomically – in short, those photographers who have not given the subject of color management any great thought and have not yet found a solution for long-term archiving, should make a point of taking a look at CromaBase.

## PHOTO STUDIO

The well-know Hamburg service complex "H2E-Studios" has been using CromaBASE® for some time now. They managed to introduce professional digital photography within an amazingly short time.

*A photo model poses for the photographer of a women's magazine. In the next room, something is being put up that looks like a street with a line in the middle. And between the props, there are parts from the kitchen of a country house. The five studios of the Hamburg company H2E are very busy. Konstantin Eulenburg, Rudolf Heidicker and the team of artists construct artificial worlds. In the studios they founded, advertising photos are taken that look as if they had been taken somewhere in the Caribbean. Pages from a catalog that convey the reader to huge, gorgeous salons or simply onto a street. It is impossible to see that these worlds were created artificially – in a large room with gray, concrete walls and a six-meter high ceiling.*

*"There are several film studios in Hamburg, but our combination of studio, photographer, props and scenery construction is not offered very often in this sector. We offer all services from make-up artists and assistants to lighting," says Rudolf Heidicker. He is responsible for constructing the scenery and Konstantin Eulenburg is the photographer.*

This was written by the newspaper "Hamburger Abendblatt" one year after the studio complex was founded. The concept was from the outset extremely promising. In the following year, they continued to systematically implement their plan of making H2E a service complex for the advertising industry. In 2004, the innovative organizer, Jacob Alberts, took charge of planning and implementing



**Konstantin Eulenburg, Photographer**

technology in the company. Digital photography was introduced. Of course, a solution had to be found for handling the new medium, such as the problem area of digital color and managing large volumes of data. The equipment at the rental studios included medium and large format



Contract proof production inside the studio with help of the CromaBOX

cameras with digital backs from PhaseONE to meet the highest professional standards. They quickly gained experience by working for customers like Otto and Tchibo and got to know CromaBASE. First of all, new cable and a powerful server system were installed in the studios. Of course, Instant Data, the manufacturer and supplier of CromaBASE, was responsible for planning and implementation. The individual studios were equipped with the easy-to-use CromaBOXes, which supply the photographer with a color correct image immediately after shooting has taken place thanks to the modern EIZO monitors. For this, the innovative "BasicColor Display" monitor profiling from the company Color Solutions was used. The only profiling that already takes into account the gamma-free LStarRGB color model. Minutes after the shooting session, the EPSON Proof Printer produces a print-quality digital proof. A new feature in CromaBASE - the art director can have the contract proof quality image including FOGRA-Keil and corresponding measurement values in his hands on the spot. "New customers are constantly getting in touch since our new concept of offering everything from one source is extremely popular. We are already known abroad for being a competent,

all-round provider of digital photography," said Konstantin Eulenburg with a certain amount of pride.

A Mecca for photographers, who rent a studio here for their production – they come here and feel at home. "15 members of staff and numerous freelancers ensure a pleasant atmosphere where everybody works hard. Additional stress factors that arose during the change-over from analog to digital photography were kept to a minimum by the use of CromaBASE," commented Jacob Alberts, who is responsible for smooth running and for developing the technology further.

A direct dedicated line to the CromaBASE server farm ensures the smooth transfer of image data to the service platform. After the rough, preliminary selection of raw images has been made by the photographer and art director, the CromaBASE upload server processes the data. At the same time, **preparations** are being made for further processing. "Since we started using the upload server, we save several hours every day that we would have otherwise spent on the further processing of the digital images. It takes a lot of time to process and burn raw images on CDs or DVDs for the customer and normally the customer is not charged for this service. Thanks to CromaBASE, we have a workflow which enhances quality, increases availability and is popular with the customer," said Alberts.

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