

## **DCA Integrated Mastering Products and Commander 3.0**

DCA's integrated mastering products make it as easy as "load, schedule and master". By utilizing a server as the foundation for pre-mastering and mastering, you can more efficiently utilize your existing systems. For example, you could be loading images to the server, while concurrently mastering images from the server and performing an HCRC verify against a replica.

DCA's products are designed and built to be ready for network mastering. Because DCA's products are designed to work together, a facility which invests in network integration can recover the costs quickly through increased production and greater through-put.

Production network mastering requires performance and reliability. DCA ensures reliable network mastering for MIS V8 supported formats (including CD, DVD, HD-DVD and Blu-ray). All of our network solutions are designed to support network mastering at the maximum speeds of your LBR. Even if you prefer to master at slower speeds, DCA ensures smooth network mastering operations.

### **Integrated Mastering**

DCA offers two integrated mastering configurations: the DDP Pro Server and the Full Network Server. Both provide the robustness and scalability to increase your production and profits. DCA also has a powerful production management application – Commander – to optimize pre-mastering, mastering and QC testing.

The difference between the DDP Pro Server and Full Network Server configuration is that the DDP Pro Server is built upon the standard DCA DDP Pro platform, and the Full Network Server uses a dedicated file server. The DDP Pro Server offers a simple, reliable first step towards the benefits of integrated mastering. The Full Network Server has almost unlimited scalability. Whatever your needs, one of the configurations will be right.

### **DDP Pro Server**

The DCA DDP Pro Server allows you to use DDP Pro in combination with a RAID Array to serve as a basic loading server for mastering. Since it functions as a server, the DDP Pro system can be placed in a different department or area of the plant from mastering. Multiple LBRs with MIS can also be attached to the Verification Server with the addition of a networking switch.

In loading job images to the RAID Array, you will be able to detect and eliminate media failures before they cause aborted mastering sessions. The DDP Pro system is also scalable. You can add additional memory, external devices and hard drive capacity.

The DDP Pro Server combines the base DDP Pro hardware configuration and adds 500GB of SATA RAID Array – larger arrays are also possible.

### **Full Network Server**

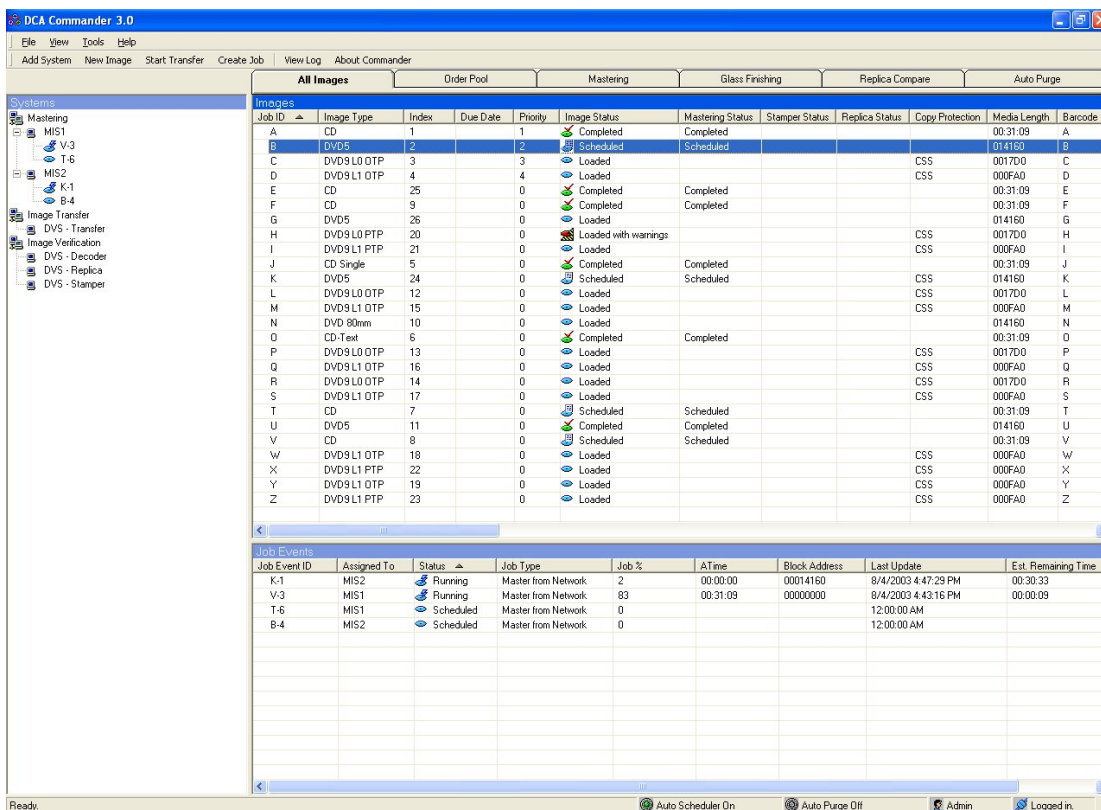
As the world's leader in signal processing and mastering products, DCA is in a unique position to offer the industry's only complete hardware and software solution for network mastering. The Full Network Server is built on a stand-alone server, which serves as the foundation for network mastering. You can have an almost unlimited combination of DCA systems integrated with the Full Network Server (multiple MIS, DDP Pro and OptiSend systems in the same network).

We will partner with you to make your transition to network mastering efficient and easy. We can custom build your network mastering system and provide on-site installation and training for your technicians. We will review and evaluate the existing internal system and arrange a set of tools which complement your existing investment, and provide the tools to increase production.

DCA has provided network servers worldwide with storage capacity over 5TB (terabytes), so you can trust that our configuration can scale to whatever your needs and future requirements may be. The Full Network Server is build using market leading components by vendors such as Compaq, Dell and HP. As your production needs increase, our designs can provide a smooth path to increased production capacity without losing your original network investment.

### Commander 3.0

DCA's Commander 3.0 offers a wide array of features for network based production workflow, job scheduling, and file server management. Commander 3.0 is the most flexible and customizable version of job scheduling software available. It easily adapts to existing company workflow and naming standards, so personnel can start using the system in a way that is already familiar to them.



**Commander has an easy to use, intuitive interface and runs on Windows 2000, Windows XP and Windows NT.**

Users can define tab views that are customized to show images at the various process steps in the Job Event viewer. The Job Event viewer gives users a consolidated view of scheduled image transfer, mastering, and verification activities of running jobs, including percent complete and job duration (all remotely from the Commander client). Through its configurable tab views, you can oversee each step of the entire process.

Commander has automatic image type detection when manually inserting images into Commander from a DDP folder, as well as enhanced data entry rules and a convenient user-defined base path folder for manual image insertion.



Commander now supports management and mastering production of both pre-recorded and recordable formats in one unified system. Recordable production now has the same powerful job queuing, work flow visualization and runtime logging as pre-recorded media.

Commander also has improved tools to manage the size and operation of the database. New automatic tools can perform database maintenance based on the size of the database or time since the last schedule database maintenance occurred. Other new maintenance capabilities include the option to automatically compact and repair the database after the last user logs out and automatic purging of log records according to user defined rules. Commander has an improved notification system to alert users about scheduling events or database maintenance events.

### **Commander Standard Configuration and Optional Configuration Features**

#### **Standard Configuration**

- Job Scheduling for one MIS/LBR
- Remote Network Client Application (1-user)
- Unrestricted Loader/Verifiers
- Automatic Disk Space Management
- Support for Copy Protected Images
- Customizable to Match Company Naming Standards.

#### **Configuration Options**

- Scheduling to Additional MIS/LBRs
- Additional Remote Network Clients
- Automatic Scheduling Option for MIS/LBRs
- Support for STP Images
- Support for Xbox Images
- Customizable Workflow Option to Define Workflow Views for Pre-Mastering, Mastering, Stamper QC, Replica QC, etc.

### **Optional Commander Features**

#### **Support for Enterprise Resource Planning (ERP) Systems**

ERP systems can now be integrated with Commander 3.0. Work order schedules, priorities, due dates, custom date fields and other data generated by the plant ERP system can now be provided to Commander 3.0 for execution and job assignment at the machine level. Commander brings production automation and real time data collection down to the machine level. Commander can also automatically schedule jobs downloaded from the ERP system.

Commander works in conjunction with ERP systems so production schedules and results can be automatically synchronized through DCA's ERP Linx module. The ERP Linx module avoids duplication of effort between ERP scheduling systems and Commander. Manually transferring job details between ERP and network mastering systems can be tedious and error prone. DCA's Commander and ERP Linx synchronization application eliminates the re-keying of production data.

#### **Enhanced Automatic Scheduling**

Commander supports automatic scheduling of images, using load-balancing and user defined rules to automatically assign images to systems based on the current production load and compatibility of available image types. The prioritization of the automatic scheduling can be based on priority, due date or both.

Commander has several new automatic scheduling enhancements including the ability to automatically reschedule glass mastering jobs due to glass finishing errors on in-line LBRs (*LBR must support Commander's in-line glass finishing status*), improved prioritization, expanded controls to limit the number of jobs in a queue, and the ability to automatically load balance by mastering job time.

### **Support for Xbox Formatter and Loading Systems**

Commander supports DCA's Xbox production system and can be used in conjunction with our Microsoft Xbox network mastering systems. With Commander, Xbox titles can reside on the dedicated mastering server for Xbox while all other titles reside on separate network mastering server(s) for CD or DVD production. Commander provides a centralized system to manage and oversee all Xbox, CD, and DVD production.

### **Production Workflow Overview**

A new user interface option enables you to view all production job status's on one screen instead of switching between various tab views. This new feature provides an alternate way to configure Commander 3.0 to display production workflow. For example, the user interface can be configured to view the status of all loading, mastering, and compare jobs associated with a particular order on a single screen. Plus, a new sorting index shows the exact prioritization of each job based on the current sort settings (by priority, due date and/or creation date).

### **Scheduling of STP encrypted Jobs**

Commander supports scheduling of STP (Secure Transport Protocol) encrypted and packaged CD and DVD content from applications such as OptiSend. By using the STP option, CD and DVD content delivered electronically with OptiSend does not have to be decrypted before mastering the image. This provides end-to-end security of content from delivery to mastering.

### **Consulting Services**

The DCA Network Consulting group also offers the following services:

- Network Design and Layout
- Performance Optimization
- Master Planning Services
- Security Planning & Solutions

DCA consultants will come to your plant, analyze your existing processes and assist you in organizing your manufacturing process models. A detailed written report covering these areas can also be provided. DCA's consultants have experience in networking technology and plant processes and can be depended on to leverage your existing investment in product and process.

DCA's consulting group can provide you with a full turn-key configuration and setup for Commander and the entire DCA family of integrated mastering products. Much of the advantage of using Commander comes from its ability to strengthen and develop the business process models for pre-mastering and mastering. DCA consulting can configure the tab views to define workflow and enforce process consistency. DCA also provides the training necessary to obtain all the benefits of the application and network.

**For more information on DCA Networking solutions and Commander, or to upgrade your DCA JCSS 1.0 or JCSS 2.x application, contact your regional DCA Sales Manager**

#### *Americas*

Fred Perez  
fredp@dcainc.com  
Telephone:  
925-426-9948  
Fax:  
240-248-1105

#### *Europe*

Chris Vangramberen  
chrisv@dcainc.com  
Telephone:  
+49-6021-45900-0  
Fax:  
+49-6021-45900-29

#### *Japan & Asia*

Nozomu Hayatsu  
nozomu@dcainc.com  
Telephone:  
+81-3-3402-5631  
Fax:  
+81-3-3402-5615