INTRODUCTION TO SCHEDULING

Before you start shooting your project, it is essential to determine a schedule. Even if your project is very small you will still be managing a lot of production elements, and in order to do that successfully, you'll need to be organized and prepared. You may think that meticulous scheduling is only a concern on complicated, high-budget features, but you could also argue that the lower your budget, the more important a good schedule is because well-planned schedules can help you save time and money and keep your project from spiraling out of control creatively and financially. Unless you already have secure funding (and lots of it), it's likely that your project will go through some transformations during the course of production and post-production.

On the following pages, we'll show you how to schedule any type of digital video project, from A/V production, to documentary, to a narrative feature. Even if your project doesn't fit perfectly into one of these categories, it is likely that one of these examples will apply to your specific scheduling needs. For example, if you're shooting a documentary with lots of enacted recreations, you might do better to follow the feature film model than the documentary model. A music video, on the other hand, could be either documentary-like or film-like depending on whether it has a narrative structure, or whether it is a document of a concert or performance.

THE OVERALL SCHEDULE

First you'll need to create a timeline for the overall project, from development to completion. Your overall project schedule will probably be based on a pre-determined deadline such as a broadcast air date or the week of the annual corporate expo. Even if your project is truly independent, you will probably have your own deadline, such as finishing a screening copy of your film for a film festival or getting your music video completed by the time the group releases their next CD.

Since the overall schedule is a broad overview, you can use anything from a simple wall calendar or personal organizer software like Now Up-to-Date to more complex scheduling software like Microsoft Project. Hollywood has traditionally divided its schedules into three parts: pre-production, production and post-production. Most projects are linear enough to base their schedule on this model. Pre-production includes development, research, writing, budgeting, scheduling, storyboarding and casting. Production is simply the principal shoot, and post-production includes editing, sound design, visual effects and delivery of the project. Of these three, production is usually the most difficult and complicated to schedule.

THE SHOOTING SCHEDULE

The schedule for the shoot, i.e. production, is usually specified in great detail. No matter what your project is, the shooting schedule will be determined by several variables:

- Availability of talent, interviewees and other key players
- Pre-determined deadlines
- The project budget
- The number of locations and whether or not travel is required
- Special effects, stunts and other complicated scenes

Creating a production schedule is a process of balancing a huge number of practicalities. Ideally, you'll be able to create this balance while maintaining an environment that allows for creativity. For example, you'll mostly likely want to schedule all of the scenes at a particular location together. After all, it's silly to shoot on one side of town one day, across town the next day, and back at your first location the day after. Similarly, if some of your performers are only available for a limited amount of time, you'll want to shoot all of their scenes together. For these reasons, and more, you'll most likely be shooting your scenes out of order. Unfortunately, shooting "out of sequence," i.e. not in the order that the story unfolds, can make it difficult for the actors to remain in character. It can also make it difficult for the director and crewmembers to control the tone and mood of the story. On the other hand, shooting in sequence is a luxury that many productions cannot afford. For example, if you need to shoot a scene from the end of your film in the mayor's office and the only day you will be allowed there is the first day of your production you'll probably end up deciding to shoot out of sequence.

Because of these issues, scheduling can become very complicated and often there is no easy answer. Having a person experienced in scheduling your type of project can be invaluable. As with budgets, you can often get a lot of scheduling advice from the different department heads - ask your director of photography how many days s/he thinks a certain scene will take and so on.

CORPORATE A/V PROJECT SCHEDULING

Corporate projects are similar to documentaries but they often use a lot of materials created by graphic artists or broadcast designers, such as animated charts, company logos and so on. The creation of these elements should be set in motion early-on since it can take a long time to prepare these sections.

Perhaps the most challenging aspect of scheduling for corporate projects, including commercials, is the cycle of approvals. You may need approval from the legal department, the marketing department, the publicity department, the CEO, the product manager and on and on. If there's a client involved, then you can potentially double the number of approvals. If these people aren't easily accessible you can be certain that they won't meet your deadlines. It's not uncommon for producers to get notes from a busy executive producer after they finished s $20,000 on-line session, requiring them to go back and re-online the project. There's no easy answer to this except to pad your schedule to allow time for these potential delays.

DOCUMENTARY SCHEDULING

Scheduling a documentary production is very different than scheduling a feature film. There are many sorts of documentaries but they usually contain some or all of the following elements:

- Interviews
- "Man on the street" comments
- Event coverage and b-roll (cutaways, establishing shots, etc.)
- Voice-over
- Film, television or video clips
- Field reporter "pieces to camera"
- Studio shoot of a presenter
- Re-enactments
- "Found footage," archival footage, etc.

There are two ways that documentaries get made: inductively and deductively. The deductive process usually starts with a script with text for the voice-over talent, reporter or presenter. Coverage is created or found through research to support the text of the script. Most documentary television shows (including the news) is done this way. The timeline can be a couple hours for a news piece or a segment, a couple of days for a studio shoot like a talk show or tabloid show, or a couple of months for an hour-long documentary series. If you're working within an already established series, the schedule can be shorter because the format -including all the elements like the opening graphics- have already been developed.

The inductive method is more common to independently-produced documentary projects, even if they later get sold to television. This method consists of writing a treatment, researching the subject extensively and then

shooting and/or acquiring as much material on the subject as possible. This can result in hundreds, or even thousands of hours of material for the project. The director and the editor whittle down the material into a coherent structure, creating a voice-over script as they go. This method usually involves a very long research phase and a long post-production phase and you often end up with something very different than what you started out with.

In both cases, post-production begins almost concurrently with production. In the deductive model, the editor is brought in almost as soon as the script is written (and often a little before). In the inductive model, the editor is brought in as soon as the filmmakers start receiving videotape material. In both cases, there are often shoots scheduled and new material found during the course of the editing process. The script is usually rewritten many times to accommodate these changes, often by the editor, director or producer simply because having a writer become acquainted with the material would take too long.

Most documentaries don't require detailed breakdown sheets or production boards. Software like Microsoft Project offers schedule tracking, salary info and so forth sufficient for many long range projects.

DV FEATURE FILM SCHEDULING

The first step in creating a shooting schedule for a feature film is to create a set of production boards. For decades, production boards done by hand but nowadays, the process is expedited by dedicated software like Movie Magic Scheduling.

THE PRODUCTION STRIPS

The first step in creating a set of production boards is to create the strips that later get placed in the board. You can buy both the boards and the strips at specialty stationers that cater to the film industry. The strips are color-coded, usually according to day or night and interior or exterior. The strips fit into clear plastic slots on the board to that they can be rearranged as needed. Each strip contains the following information for one scene:

- Day or Night
- Page Count
- Scene Number
- The slug line from the script
- A one-line description of the scene. This isn't always necessary but if you have ten scenes with the slug-line "EXT. HIGH SCHOOL - NIGHT," it

can be helpful to have a little more information.

Software tools like Screenplay Systems' Movie Magic Scheduler help relieve the tediousness of this work by importing information from your script. If your script is properly formatted, slug-lines, page numbers, scene numbers andpage count can all be imported directly into breakdown sheets that have corresponding production strips. Some information, like one-line scene descriptions will have to be added scene by scene. You can print these strips out and place them in special colored-plastic sleeves for placement on your board. Screenplay Systems also makes production board and perferated paper for printing the production strips.

THE PRODUCTION BOARD

The main benefit of creating a set of production boards is that you will have a durable, portable spreadsheet that lists every scene in your project, usually over 150 scenes for a feature film. You arrange the strips into the order you wish to shoot and add separators for each day of the shoot. You can look at a shooting day and quickly see the total page count for that day, which crew and cast members are needed needed on set and whether it's a day or a night shooot.

The production board traditionally lists the castmembers but you can also include information about extras, special props and locations, and special effects. If an actor gets sick or it rains, you can reorganize your shoot using the boards without having to wait until you get access to a computer. Production boards allow for the sort of "thinking on your feet" that is always necessary during a shoot.

PICK-UPS

There are a number of reasons why you might need to reshoot or add something and most projects schedule a few days or a week for pick-ups whether they'll need them or not. If you plan for it in advance, you're less likely to have availability problems with your cast and crew who by now will have moved on to other projects. Also, the sooner you schedule your pick-ups after the end of your shoot, the less trouble you'll have with location and set availability.

SCRIPT BREAKDOWN

Script breakdown is the process of analyzing your script to determine all

of the components out of which it is made. During script breakdown, you'll systematically build lists of everything from characters, props and locations to special effects, and costumes. But script breakdown is much more than a simple inventory. The process of breaking down your script and the analysis and decisions you'll make when doing your breakdown will generate the data that is required to prepare a budget and schedule your shoot.

Breaking down a script is not just a suggestion, it is an essential step towards starting your production. During the script breakdown process you're going to create a number of lists and schedules, but more importantly, you're going to develop an understanding of your script that will be necessary for answering the thousands of questions that will come up during production. This familiarity with the script will allow to effectively deal with the changing conditions and concerns of a complex shoot.

Depending on the length and nature of your script, you can use just about any method to break down your script. Obviously, there's little to do if your script involves just one or two characters and is set on a single location. However, no matter how complicated your script, it's important to perform a systematic, thorough breakdown.

For simplicity, we've chosen to divide the realm of digital video production into two categories: A/V and Feature. A/V productions are the traditional industrial, corporate, multimedia or advertising productions that are usually small-scale productions, frequently shot in a studio and rarely requiring more than a day or two of shooting. Training videos, corporate presentations, news features, or simple stand-up pieces targeted at multimedia CD-ROMs and web sites are examples of A/V productions. Feature productions are larger productions targeted for theatrical, video or TV release, and are usually shot on many locations over weeks or months.

BREAKING DOWN AN A/V PRODUCTION

Though A/V productions are typically shorter, simpler productions, script breakdown is no less important. As in a larger production, time is money and the breakdown process is where you'll define the lists and procedures that will ensure the best use of your time as well as help you decide what you can and cannot afford.

To begin breaking down a script, you need to divide it into sections. With a feature script this is easy because features are already divided into scenes. But A/V scripts are not necessarily written as separate scenes. However, you can usually find some natural break or segments in your script, no matter what it's structure or content. If it's a corporate presentation, perhaps there are different speakers or changes in subjects, news features may have changes in locations, multimedia shoots might have many different characters. Whatever the nature of your shoot, take your script and try to divide it into discrete chunks. Now

take each chunk and begin to break it down.

Create a separate "breakdown sheet" for each section. Give the sheet a sensible title and even a description of the scene if necessary. Different members of your crew may need to read these sheets and it's important that they understand which segment of the production you are referring to.

On each sheet, list the characters/actors that are required for that scene as well as props, locations and sets. If this is a multi-camera shoot, list how many cameras you'll need and what type of crew you'll need (number of camera operators, technical director, sound, etc.). To the best of your ability, list the type of lighting you'll need. Is this a studio shoot using studio lighting? If so, make a note of what kind of lighting configuration you think you'll need (standard 3-point lighting, limbo lighting, etc.). By listing all of the different production set-ups you'll need, you can more intelligently schedule the shooting of different segments. For example, if you can immediately see which scenes need a particular lighting setup, you can schedule those scenes together to save time on redundant lighting changes.

List all of the supplemental materials that might be required for this segment. Are there special guests that must be contacted and scheduled? Are there video segments that will be inserted on-line? Finally, list any special requirements this scene may have and the relevant crew and preparation. For example, does the scene require blue screen photography for later compositing? If so, you'll need special set and lighting crew. Or perhaps the scene has particular audio requirements such as pre-recorded music or a microphone set-up for a live music performance.

Your main concern is simply to create readable, understandable lists of every element that will be required to shoot each scene. This is your chance to learn about all the props you'll need to gather, and all of the phone calls and schedules you'll need to coordinate. This is also the data that you'll use to begin the budgeting process discussed in the next chapter.

BREAKING DOWN A FEATURE PRODUCTION

Breaking down a feature is much more complicated than breaking down an A/V production because shooting a feature is much more complicated than shooting an A/V production. Because a feature shoot is much longer, typically involves many more actors and crew-members and can require locations spread all over the world, your breakdown chores can be much more complicated.

Usually, you'll do two breakdowns for a feature production. On large productions, a preliminary breakdown will be performed by the production manager to facilitate budgeting. Once the budgeting and storyboarding are completed, the first assistant director will perform another, more detailed breakdown and then prepare a shooting schedule.

Whatever your role--producer, director, production manager--if the job of

script breakdown falls on your shoulders, there are a number of computer programs that can help you through this complicated procedure. However, despite the power of these programs, we recommend some combination of computer automation and manual organization. Script breakdown is your chance to dissect your screenplay, understand how it works, and get a handle on everything that is going to have to happen to get the script produced. If you leave too much of the work to the computer, you may not have enough information in your head to be able to make intelligent decisions and choices during a busy production.

To understand the full importance of script breakdown, it's necessary to understand how breakdown relates to scheduling your shoot. It is during the script breakdown that you will begin to make logistical decisions about which scenes will be shot together, which scenes will require new camera set-ups, how much shooting will be done during the day and how much at night and night and so on. As you gather this information, you will be better prepared to build a schedule that is efficient and, in the case of working with union actors and crew, cost-effective.

The ultimate goal of script breakdown and scheduling is a Strip Board, which serves as your shooting schedule. Comprised of vertical, movable strips, a strip board includes a separate strip containing all information required to shoot each scene of your movie. Each strip is printed in a different color, letting you quickly see which scenes are interior or exterior, day or night. Because the Strips can be physically moved around the board, you can quickly and easily experiment with different schedules and re-arrange your schedule in the event of troubles‹bad weather, sick actors, etc.

It's good to understand what your ultimate breakdown concerns will be even as your start your preliminary, simple breakdown. At this point, your concern is to peform a breakdown to gather enough information to begin your budgeting process.

BREAKDOWN SHEETS

Before you begin your script breakdown, make sure that your scenes are numbered. If you're using a screenwriting program such as B.C. Software's Final Draft then you can use that program's automatic scene numbering feature. If not, place sequential scene numbers next to each slug-line in your script. Whether you're numbering your scenes automatically or by hand, you'll need to start thinking about the logistics of your actual shoot.

Consider a scene where a man gets off of a bus, walks up the street to a house, and climbs a flight of stairs to the front door landing. On the landing, he gets his mail out of his mailbox and discovers a ransom note from foreign terrorists. He reads the note, blanches, and then goes inside the house in a

panic. Is the scene at the top of the landing a separate scene from his trip up the street? When numbering your scenes, (or preparing to have your writing software number them for you) go through your script and think carefully about camera setups and crew/cast requirements for each of your scenes. Then you can make intelligent decisions about when and how to start a new scene. You may find you need to add some new slug-lines to divide your scenes, ore remove slug-lines to combine them.

You'll likely make changes to your script after you begin shooting. From simple changes in dialog to adding, deleting or moving entire scenes, your script may be drastically changed by the end of your shoot. Consequently, scene and page numbers can quickly become invalid. To get around this, you'll need to "lock" your pages when you start the breakdown process. From this point forward, when you add new pages, you'll need to adopt an A,B,C numbering system. For example, if you insert three pages after page 29, those pages will become pages 29A, 29B and 29C. Similarly, if you delete pages, don't throw out those page numbers. Instead, just insert a blank page with the individual number or range of numbers that you want to delete. Scene numbers will require the same sort of number/letter numbering scheme. A scene that is deleted is usually represented in the script by a scene number and the word OMIT or OMITTED.

Most screenwriting programs will take care of locking pages for you and will automatically manage the correct number of your pages. For no other reason, these programs are invaluable during a shoot.

With your scenes numbered, you're ready to start preparing a breakdown sheet for each scene. At the top of each sheet you'll fill in a number of things including the scene number, the name of the scene and a brief description. You must also indicate a page number that corresponds to the page in your script where the scene occurs.

Because a scene can be just one or two lines long, breakdown page numbers are measured to within 1/8 of a page. If you're using standard screenplay format, there will be about eight inches of content on each script page. Consequently, it's easy to divide your page into eighths: simply measure the number of vertical inches a scene occupies. Three inches equals 3/8ths of a page. Mark the page number, in eighths, at the top of the page.

Now list all of the elements that the scene will require:

- Cast
- Stunts
- Extras (Silent)
- Extras (Atmosphere)
- Special Effects
- Props
- Vehicles/animals

- Wardrobe
- Make-up/Hair
- Sound Effects/Music
- Special Equipment
- Special Shooting Concerns

Most of these items are self-explanatory. However, it's important to note a few details. When you hear the term "special effects" you might think "rampaging dinosaurs" or "giant space stations." But special effects can also be less "special," ranging from rain to gunshots to a breaking window. These effects need to be accounted for in your breakdown sheets. In the case of special effects, stunts and animals, you'll also need to consider if you'll need special crewmembers. For example, if a scene calls for a man to fall out of a window, you'll need special "falling out of a window" gear and, possibly, a stunt-coordinator to make sure everything goes smoothly. Special effects supervisors and animal wranglers might be necessary for certain special effects or animal shots, as well as the presence of the local fire department

There are two types of extras: silent and atmospheric. Silent extras are characters who serve a narrrative purpose but don't have speaking parts. Say you have a scene where the cops are chasing a bad guy down a dark alley. They round the corner to find the alley empty save for a wino who points them in the wrong direction. The wino is a silent extra. Atmospheric extras are the background people who make a particular setting look real. Crowds at a baseball game, for example.

As you work through your script you may find that some scenes need to be split into separate scenes while other scenes can be combined together into one breakdown (and, ultimately, one strip on your strip board).

For example, consider a scene with a man bunjee-jumping off of the roof of his apartment building. The scene starts on the roof of the building as he prepares for his jump. Cut into this shot are shots from the ground of the man standing on the ledge of the building. Back on the roof we see him muster his nerve, tighten his bunjee and jump. Perhaps now we cut to an effects shot, a point-of-view angle as the man plummets to the sidewalk. Then, a POV from the sidewalk as the man screams toward the camera, slows, pauses and then shoots back toward the roof. Finally, the scene might end with the man being unhooked from his bunjee cord and lowered to the sidewalk where he is promptly arrested by the police.

Though this is one scene, you may want to consider splitting it up and creating three separate breakdown sheets, one for the roof, one for the ground and one for the effects shot that will be required for the POV plummet shot. For each scene, you'll want to list all of the requirements of each setup. As you work through the breakdowns, you may decide that you want to do a separate breakdown that assumes the use of multiple cameras. This is the time to think

of all the possible ways to shoot your shot, so that you can be sure to budget for all of the equipment, personnel and time that you might need.

Programs such as Screenplay Systems Movie Magic Scheduling can perform breakdowns for you. If your screenwriting program can export in Movie Magic's special format, you can simply pour your script directly into Movie Magic Scheduling and let it create breakdown sheets for each scene. Fortunately, this process is not completely automated, you'll still need to enter all of the information for each category. Scheduling provides an excellent environment for entering and sorting all of this information, while making you think through your script to perform an intelligent breakdown. Best of all, it can make a full strip board for you.

UNION OR NON-UNION?

The main reason for becoming a union signatory, i.e. signing a labor agreement with a union or a guild, is so that you can hire members of that union for your production. Only medium to high budget movies can afford to use the labor unions like IATSE and the Teamsters. But many low budget projects use SAG actors and SAG has created several different agreements based on different sized budgets in order to make it easier for independent filmmakers to work with SAG actors. If you don't sign an agreement, there's still a chance that union crew members will work on your project but if the union finds out, they will most likely have to quit before the project is finished. The unions do not agressively hunt down low budget pictures, however, and if your project is fairly low-key, it is unlikely that you'll have a problem with the union.

UNIONS AND SCHEDULING

Film industry unions and guilds like SAG (the Screen Actors' Guild) and IATSE (International Alliance of Theatrical Stage Employees) have strict regulations regarding scheduling. These regulations will be written into the contract, (or, in the case of SAG, the "SAG agreement") that you sign when you decide to do business with a union member. As with any contract, be aware of all the terms when you sign and schedule your shoot. You may be required by the union to use a specified number of union members whether you need them or not. For example, in the SAG low-budget agreement, the production must hire thirty SAG extras. To get current regulations, you'll need to contact the union. Almost all of the unions have a presence on the web and the SAG web site is particularly helpful.

Here are some of the typical union-related scheduling concerns that you'll need to consider when scheduling:

- **Hours -** usually 8 or 10 hour days, before going into overtime.
- **Holding Days -** a day when an actor isn't used. According to union rules, you can't go more than 10 days without using an actor without having to pay a fine. So, it's in your best interest to schedule all of a particular actor's scenes close together. This rule ensures that the actor's time is well-used, and is intended to keep them from missing other work opportunities.
- **Meals and breaks -** most unions have specific rules as to when, how long and how many breaks a crew or cast member gets.
- **Per diem -** actors and crewmember travelling on location usually get a daily cash allowance, called "per diem" money.
- **Turnaround -** usually a minimum of 10 hours must pass between the "wrap" of a day of shooting and the "call time" the next day.
- **Underage actors -** usually there must be a guardian for each child actor, a teacher on set during school days, and the hours a child can work are limited.
- **Fringes -** If you hire union actors and castmembers, you will probably have to pay "fringe benefits" such as health insurance, pension and welfare. You'll probably need an accountant on set to keep track of payroll or an outside payroll service.

This document is a companion to the Digital Filmmaking Handbook, 2nd edition, by Ben Long and Sonja Schenk, published by Charles River Media (www.charlesriver.com).