



Toon Boom Harmony 12.2.1
- Harmony Edition -
Control Center Guide

Legal Notices

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Chapter 1: Introduction



What is Harmony?

Harmony is a team-based infrastructure for animation production. Its array of cutting-edge features increases productivity and encourages creativity. Developed in conjunction with leading studios worldwide, Harmony is specifically designed for long-term episodic and feature length projects, providing a true animation pipeline. Several animators can work simultaneously on the same scene while the asset library provides users with easy access to up-to-date media assets.

Harmony is truly scalable; more than 100 staging clients can share animation just as easily as a few can. Whether you are a start-up studio or a large established animation facility, Harmony serves as the animation backbone ensuring sustainability and growth.

Harmony is a powerful solution that brings together multiple teams working on the same project, whether in-house or remotely. The Harmony solution offers a robust asset management system that enables users to quickly locate assets, share tasks on complex scenes and centralize all assets in a common repository. Tremendous gains in efficiency and quality are made by the teams, who enjoy a smooth flow between each task, and more time dedicated to their creative assignments.

What is Harmony Server ?



At the heart of the Harmony solution is the server, which centralizes all the production assets in a repository. Loaded with production proven tools to manage administration tasks, the server is completely flexible and will fit in with your existing infrastructure, whether you're on Windows, Mac or Linux.

In addition, the server is critical at the end of a production for rendering projects efficiently. The rendering process, controlled directly by the server, not only renders production scenes but also executes the batch vectorization of the scanned drawings. You can send an unlimited number of scenes to render and change their priorities depending on your deadline! You can also render final frames locally or batch process over a network in the background or at scheduled times.

What is Web Control Center?



When you're running a studio, you will most likely have a database setup. This enables all the artists working on your production to share the same scenes and assets.

What the Web Control Center enables you to do is to host this database on the Internet. Then, you can have freelancers log in from anywhere with an Internet connection. They can download a scene from the database, work on it, and upload it again. No more need to spend time copying files to an FTP. No need to have an administrator exporting and importing files from the database. You can do it all directly through Web Control Center.

Chapter 2: Control Center



Using Harmony Server has the advantage that it centralizes your entire production on your server and organizes it into structured database. The key piece of Harmony Server is the Control Center module. From Control Center, you can manage your production database, users, visualize your rendering queue and more.

This chapter explains the general administrative tasks which must be performed to successfully run the Harmony solution.

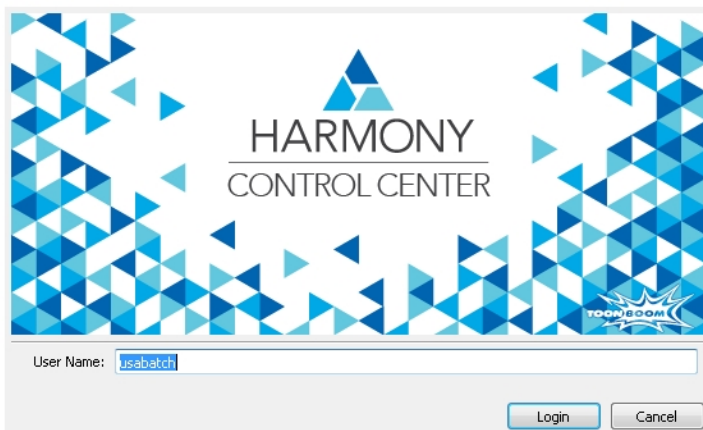
This chapter is divided as follows:

- [Starting Control Center on page 7](#)
- [Centralized Data, Checking Out and Global Locking on page 10](#)
- [Managing Harmony Users on page 11](#)
- [Managing Environments, Jobs and Scenes on page 17](#)
- [Exporting and Importing Data on page 38](#)
- [Control Center Commands on page 45](#)

Starting Control Center

To manage a production, you will need the Control Center module. Control Center is used to create new environments, jobs, scenes and users, as well as to import and export scene packages. Control Center directly manages your server database.

You can start Control Center from the server or any client machine.



Before accessing the main Control Center interface, the Database Login dialog box opens, requesting a user name. By default, there is a user name created called `usabatch`. Type this user name to log in the first time. Once logged into Harmony, you can create your own set of users.

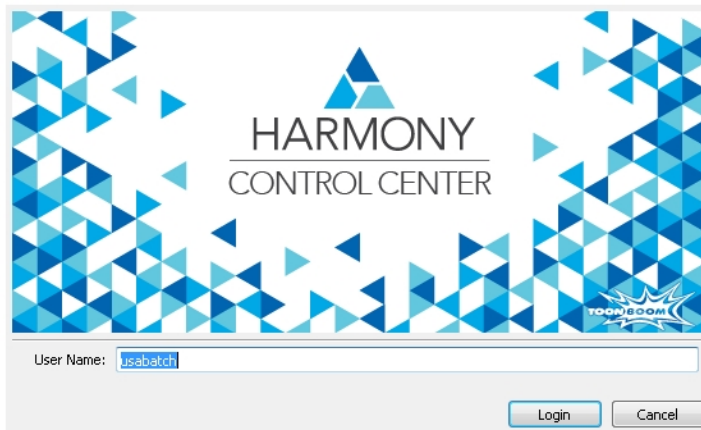
IMPORTANT: IMPORTANT: Do not delete the `usabatch` user name as it is used by Toon Boom Harmony Server for batch processing.

How to open Control Center

1. Do one of the following:

- ▶ Windows: **Start > Programs > Harmony 12.2 [edition] > Control Center**
- ▶ Mac OS X: **Applications > Toon Boom Harmony 12.2.1 [edition] > Control Center**
- ▶ Linux: **`/usr/local/ToonBoomAnimation/harmony_12/lnx86_64/bin/Controlcenter`**

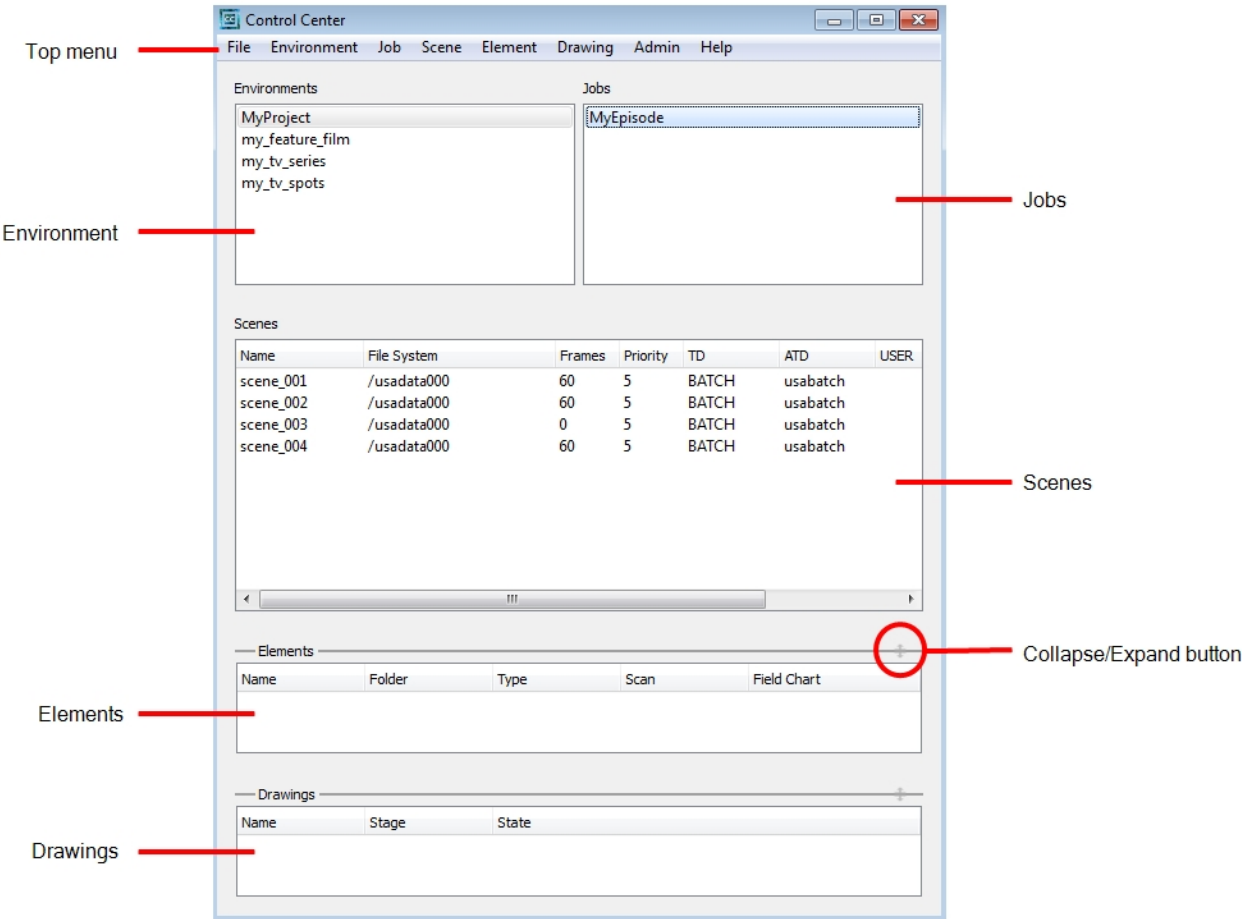
The Database Login dialog box opens.



2. In the User Name field, type `usabatch`. This is the default Harmony user.

The Control Center application opens.

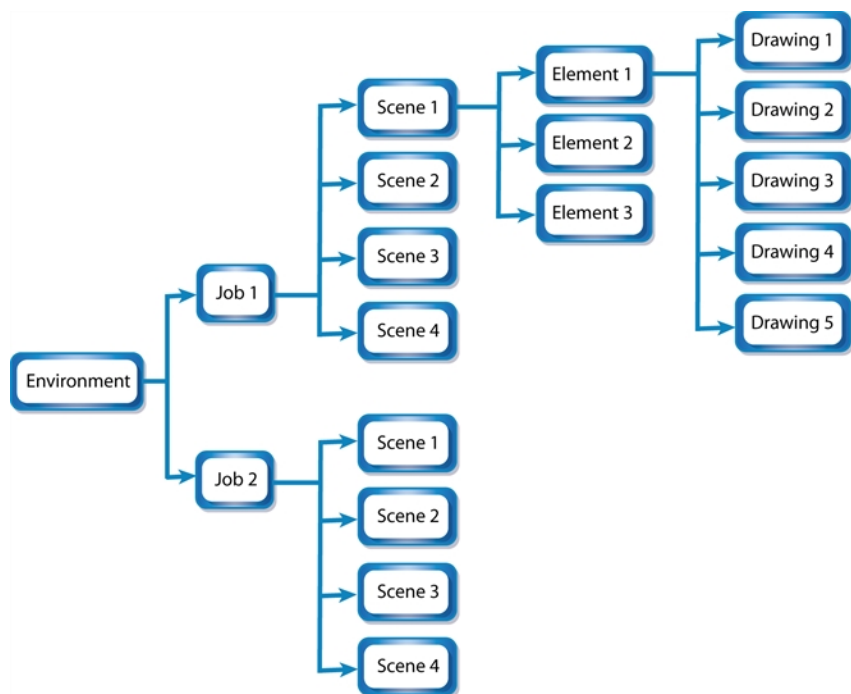
User Interface



The Control Center interface is divided into six areas:

Parameter	Description
Top menu	Contains the commands available in Control Center. You can also find the commands in the contextual menus available in each area by right-clicking.
Environments	Displays one of your projects, such as a feature film, a TV series or a group of TV spots.
Jobs	Shows the sequences or episodes in your project (Environment). Select a project from the Environments list to see your jobs.
Scenes	Shows the scenes in an episode or sequence (Job). Select a job from the Jobs list to see your scenes.
Elements	Shows the layers or columns in a scene. Select a scene from the Scenes list to see your elements.
Drawings	Shows the drawings in your layer or column (Element). Select an element from the Elements list to see your drawings.

Here is a typical example of the database structure:



Centralized Data, Checking Out and Global Locking

When working with Harmony Server, all scenes and their data are stored directly on the database; no data is saved or stored on the client machine. The client machines access the database and load the scenes and drawings directly from the server. Each time the user saves a scene, the data is updated directly on the server. There are no upload or download operations done between the server and the clients. However, when working with the Web Control Center, users must download and upload scenes to the Harmony database.

Harmony has a lock system, referred to as *global lock*, for the different scenes and scene assets. Since all data on the server can be accessed directly and modified from any client machine, by default, scenes are locked and users must get the rights to modify them in order to save their work onto the server. Only one user at a time can modify a scene. Once a scene is opened on a client machine, other users can open the scene in read-only mode if they need to consult it, but they will not be able to save any modifications.

In the Web Control Center, when a scene is downloaded locally by a user, global locking does not apply as it will be modified in Harmony Stand Alone. To ensure that scenes are not simultaneously modified and causing conflicts, scenes downloaded through the Web Control Center can be checked out by a user. When scenes are checked out, they can be opened in read-only mode in Harmony Server.

Global lock has several levels:

A Harmony project can be locked at various levels. Its timing, drawings, version and palettes can be locked. Locking means that you have the rights to modify a scene or its assets. Other users cannot modify locked items. If someone tries to open a locked scene, it will be displayed as read-only.

Here are the different lock possibilities:

Lock	Description
Scene or Version Lock	Controls the Xsheet timing, layers, nodes but not the drawing, palettes, palette-lists or templates.
Drawing Lock	Only one user can edit and save a locked drawing.
Palette Lock	Only one user can edit and save a locked palette.

Palette-list Lock	Only one user can edit and save a locked palette-list.
Library Folder lock	Only one user can edit and save into that folder in the Library.

There are several different ways to obtain the rights to modify the scenes. It can be done when the user loads a scene from Harmony, inside the application once the scene is loaded, or when an environment, job or scene is created using the Control Center module.

Managing Harmony Users

In an animation studio, there are usually several people using Harmony who will probably be assigned different tasks, such as ink and paint or compositing. Normally, you should create a different user for each one. This way, the person assigned to ink and paint will only have access to the Paint module and not to other features that are not relevant to their work.

Anyone who uses Harmony must have a login name in order to run any of the modules. When using Harmony in standalone mode, there are no username or password required. The Harmony login is independent from the computer session login.

Users connecting to the database through Web Control Center should have a password as it's safer for accessing via the Internet. For Web Control Center users, it is recommended to create the users through Web Control Center so you can set the password.

On Windows, by default, only the `usabatch` and `BATCH` users are created. However, you should not use them for your staff. These should be kept for Harmony Server when performing background operations, such as batch processing—see [Creating a Default User for Batch Processing on page 16](#).

IMPORTANT: Before making the Web Control Center public, set passwords for all users so no one can delete everything.

The User List dialog box lists all the users and their details, including: username, first and last names, and user type. The buttons at the bottom of the dialog box let you add, delete or modify the list of users.

All Harmony users must have their name on the user list to log in to any application. The system uses the login to track activities; it is not a security lockout.

Each login also has a user "type" assigned to it which allows access to only some of the Harmony modules.

As your studio network grows and evolves, you may need to delete old or obsolete user profiles from your system. After you delete a user profile, the person who used that profile will no longer be able to access Harmony. You cannot delete yourself from the user list. If you accidentally delete a name, you must follow the procedures for adding a user to get the name back into the system.

You can modify the user profiles at any time to update the user information.

NOTE: NOTE: To change your own user profile, login as `usabatch` (the default user).

How to view the user list

1. From the top menu, select **Admin > Users**.

The User List dialog box opens and displays your login name and a list of the other users in the system.

Manage Users

Username	First Name	Last Name
BATCH		
c-lynn	Carolyn	Lynne
jsmith	John	Smith
jsmith-01	Johnny	Smithe
sall	Shaun	Alan
usabatch		

How to add a user to Harmony

1. To view the list of Harmony users, select **Admin > Users**.

The User List dialog box opens.

Manage Users

Username	First Name	Last Name
BATCH		
c-lynn	Carolyn	Lynne
jsmith	John	Smith
jsmith-01	Johnny	Smithe
sall	Shaun	Alan
usabatch		

2. Click **Add**.

The Add User dialog box opens.

Create New User

New username:

First Name:

Last Name:

Type:

Set Password

New Password:

Confirm New Password:

3. In the User Name field, type the person's user name.
4. Type the person's first name and last name in the corresponding First Name and Last Name fields. You can enter a space if you want leave the field blank.

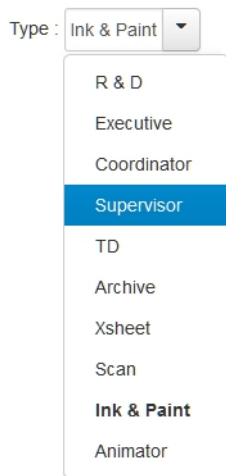
User Name:

First Name:

Last Name:

Type:

- In the Type menu, select the user type. This defines the type of work the user typically performs. It will allow or block the person from accessing certain Harmony applications and perform operations in Control Center—see [User Types and Restrictions](#) on page 15.



- Click **OK**.

The name appears in alphabetical order in the user list.

Username	First Name	Last Name
BATCH		
jsmith	john	smith
ltam	Liven	Tam
mec	Marie-Eve	Chartrand
sali	Shabana	Ali
test	gdfg	dfgdgd
usabatch		

How to delete a user

- To view the list of users, select **Admin > Users**.

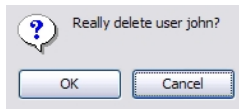
The User List dialog box opens.

Username	First Name	Last Name
BATCH		
jsmith	john	smith
ltam	Liven	Tam
mec	Marie-Eve	Chartrand
sali	Shabana	Ali
test	gdfg	dfgdgd
usabatch		

- In the user list, select the name you want to delete.

3. Click **Delete**.

The Confirm dialog box opens.



4. Confirm if you want to delete the user from Harmony.

- ▶ Click **OK** to delete the selected user.
- ▶ Click **Cancel** to abort the delete command.

How to modify user information

1. To view the list of users, select **Admin > Users**.

The User List dialog box displays.

Username	First Name	Last Name
BATCH		
jsmith	john	smith
ltam	Liven	Tam
mec	Marie-Eve	Chartrand
sali	Shabana	Ali
test	gdfg	dfgdgd
usabatch		

2. Select the profile to modify.

3. Click **Modify**.

The Modify User dialog box appears.

You can update any of the fields in the user's profile.

If you change the user's type, you change the user's authority level.

4. Type or select the new information in any or all of the following:

- ▶ **User Name:** The user's login name
- ▶ **First Name:** The user's given name
- ▶ **Last Name:** The user's family name
- ▶ **Type:** The type of access the user has in the system

5. Click **OK**.

User Types and Restrictions

Here are the different user types available and their restrictions:

Feature	Control Center	Web Control Center	RND, Coordinator, Supervisor, TD, Executive	Animator	Xsheet, Archive	Scan	Ink & Paint
Create Environment	•	•	•				
Change Asset Lock on Environment	•	•	•				
Delete Environment	•	•	•				
View Vectorize Queue	•		•	•	•	•	•
View Render Queue	•		•	•	•	•	•
Create Job	•	•	•	•			
Change Job Priority	•	•	•	•	•	•	•
Change Job Status	•	•	•				
Delete Job	•	•	•				
Create Scene	•	•	•	•		•	•
Delete Scene	•	•	•				
Unlock scenes locked by another user	•	•	•				
Unlock scene version locked by another user	•	•	•				
Unlock scenes locked by me	•	•	•	•	•		
Unlock scene version locked by me	•	•	•	•	•		
Move Scene	•		•				
Rename Scene	•	•	•				
Clear Scene	•	•	•				
Change Scene Priority	•	•	•	•	•	•	•
Change Scene Status	•	•	•				
Reorder Scenes	•	•	•				

Copy Scenes	•	•	•	•			
Send to Vectorize	•	•	•	•	•	•	•
Send to Unvectorize	•	•	•	•	•	•	•
Send to Rendering	•	•	•	•	•	•	•
Add/Modify/Delete Users	•	•	•				
Change Approval Policy	•	•	•				
Change Vectorize Style	•		•	•	•	•	•
Change Asset Lock	•		•				
Database Lock Manager	•		•				
Export Scenes	•	•	•	•	•		
Import Scenes	•	•	•	•	•		
View Error Log	•	•	•	•	•	•	•
View Elements	•		•	•	•	•	•
View Drawings	•		•	•	•	•	•
Open in Control Center	•	•	•	•	•		
Open in Paint	•		•	•	•	•	
Open in Scan	•		•	•	•	•	•

Creating a Default User for Batch Processing

If you intend to use the batch processing feature in Harmony or if you are installing the application on the server machine, you must create:

- An operating system user called `usabatch`
- A Harmony user name called `usabatch` through the **Control Center** module.

Harmony uses this user profile during batch rendering.

IMPORTANT: It is important to verify that these users exist **before** starting a project and setting the batch processing.

- **Operating System Users**

Windows: The `usabatch` operating system user profile was automatically created by the installation wizard.

Mac OS X: The `usabatch` operating system user profile must be created manually or using the configuration assistant.

Linux: You must manually create the `usabatch` operating system user.

Regardless of the operating you are using, a `usabatch` user account must exist on your operating system. If you need to create this account, see your system administrator.

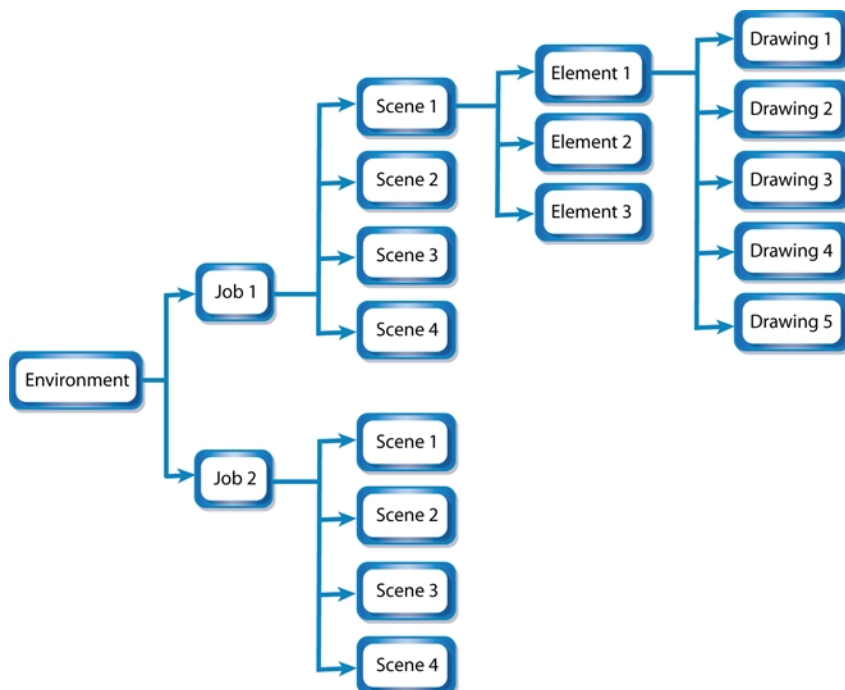
- **Harmony User Names**

The `usabatch` Harmony user is created during the installation process on Windows, Mac OS X and Linux. There is no need to create it manually unless it was deleted. To manually create the `usabatch` Harmony user, refer to the Toon Boom Harmony Installation Guide.

Managing Environments, Jobs and Scenes

Every project you create with the Harmony solution starts with an environment; it is the highest level in Control Center. You can build a complete environment by adding jobs, scenes, elements and drawings.

Control Center divides your animation project into the following categories which organize the components of your animated projects:



- **Environment:** This is the name of your animation project.

Example: `adventure_movie`

- **Jobs:** These are the major sections of an environment, such as sequences or episodes.

Example: `adv_seq_001`, `adv_seq_002`

IMPORTANT: All jobs are stored in the same location in the Harmony database. Be sure to prefix all job names appropriately, so you can identify the project it belongs to. Each job must have a **different** name. You **cannot** give two jobs the same name.

- **Scene:** These are the different shots in a job.

Scenes are contained in their respective job folder in the Harmony database. Prefix all scenes names appropriately, so you can identify which environment and job they belong to.

Example: `sc_001`, `sc_002`

- **Elements:** These are the different layers and columns in your scenes.

If you have not created an exposure sheet yet, the Frames column in the **Scenes** list displays 0 and no elements appear in the Elements or Drawings list.

For example, scene 002 of `show_episode_6` could have the following elements:

- A background called `bg`.
- A character called `tony`.
- A highlight effect called `hl`.

You would then find these elements under job 002 and the `show_episode_6` scene. The Elements list would display the element names, types of elements in a scene, the type of scans, and the size of the field chart.

- **Drawings:** These are actual drawings of the elements (layers) in your scene.

For example, the `tony` element in 002 of `show_episode_6` could consist of 35 drawings. To find these drawings, you would look under Drawings to see the keyframes, state, and stage of each drawing.

As your projects come and go, you will probably want to start cleaning up your database, as well as your server's hard disk, by removing old and obsolete environments and their associated animation data.

IMPORTANT: After you delete a scene, job, or environment, the associated data is **permanently removed** from your storage disks. Make sure you really want to erase these items before you delete them as there is no way to retrieve the data after it has been erased.

You might want to export old environments and archive them somewhere else before you delete them from your system.

If you are working in a mixed Windows/Mac OS X/Linux environment or share files with other studios that do, you should use lowercase letters to name the various items in your animation projects and not include any spaces in component name. For example, write `the_show` instead of `The Show`. This recommendation is due to the fact that Linux is case-sensitive while Windows is not.

Managing Environments

Harmony uses environments to manage and organize related projects. Using environments allows you to organize your production projects by their nature or type.

If your projects center around episodic and commercial types of work, you can create two environments. For example, one environment called **commercials** and the other called **the_show**. Then you can insert the jobs that relate to each type of project. When you want to work on a commercial project, open the **commercials** environment and select the commercial job you need. Similarly, if you want to work on an episodic project, open the environment called **the_show**.

Environment	Job	
commercials	dentist	sc_001
		sc_002
	soda	sc_001
	cereal	sc_001
the_show	sho_001	sc_001
		sc_002
	sho_002	sc_001
	dentist	sc_001
sc_002		

When you are ready to remove old environments, you can delete them from the database. However, in order to prevent accidental loss of data, you can only delete an empty environment (an environment that contains no jobs, images, or palette information).

How to create an environment

- Do one of the following:
 - From the top menu, select **Environment > Create**.
 - Right-click in the Environments section and select **Create**.

In mixed platform Environments (Windows/Mac OS X and Windows/Linux) it is best to name everything in lowercase so data can be interpreted the same way on each operating system. The same is true if working between studios using Windows, Mac OS X, and Linux.

The Create Environment dialog box appears.

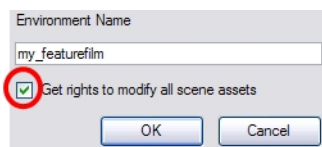


- In the Environment Name field, type the new project's name.

The environment name is alphanumeric and can include underscores (_), but no spaces or other special characters. The environment name is case sensitive.



3. If you want the user to automatically get the rights to modify all the scene assets (drawing, scene setup, palette lists, etc.), select the **Get Rights to Modify All Scene Assets** option.



4. Click **OK**.

The new environment appears in alphabetical order in the Environments list.

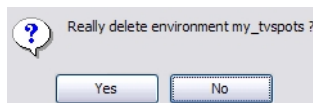
After you create an environment, you must add it to the Batch Processing queue so it can vectorize and render the drawings and scenes automatically. You only have to add the environment to the Batch Processing queue once.

How to delete an environment

1. In the environment section, select the environment to delete from the Environments list.
2. Do one of the following:
 - ▶ From the top menu, select **Environment > Delete**.
 - ▶ Right-click in the Environments section and select **Delete**.

The Delete command is only available for an empty environment. You must delete the scenes and jobs before you can successfully delete the environment.

The Confirm dialog box appears.



3. Click **Yes** to delete the selected Environment.

The environment no longer appears in the Environments list.

Setting the Resolution File

When you create a new environment or job, you can create a project resolution list that will appear in Harmony Advanced or Harmony Premium. If you work with a particular resolution, you can insert it in your list so it's available when doing the compositing in Harmony.

You need to copy the `resolution.conf` file at the server, environment or job level. If you insert the file at the environment level, it is not necessary to add one at the job level. All jobs in the environment will use the `resolution.conf` file at the environment level. If you want all environments to use the same `resolution.conf` file, place the copy at the server level in the `USA_DB` folder.

Starting with Harmony Server 11.1, the resolution list is stored in an XML file. The `resolution.conf` file is still used and it is still the file that you will copy from the `samples` folder. If you modify the resolution list in the Scene Settings dialog box, Harmony will convert the file to an XML file.

The `resolution.conf` file is located here:

- Windows: **Program Files > Toon Boom Animation > Harmony 12.2 [Edition] > resources > samples**
- Mac OS X: **Applications > Harmony 12.2 [Edition] > tba > resources > samples**
- Linux: **/usr/local/ToonBoomAnimation/harmony_12/resources/samples**

NOTE: For Web Control Center, there is a WebCC preview resolution for previewing movies and thumbnails. It should be in the `samples` folder. If it is not, be sure to place a copy in the resolution presets.

Insert the `Resolution.conf` file in the following directory:

Resolutions common to all jobs in the environment.	<code>/USA_DB/environments/environment_name/resolution.conf</code>
Resolutions common to all scenes in the job.	<code>/USA_DB/db_jobs/job_name/resolution.conf</code>
Resolutions common to all scenes and environments.	<code>/USA_DB/resolution/resolution.conf</code>

All scenes found under the environment or job have access to the resolutions stored in that file.

You can simply type new resolutions, modify or delete existing ones from the list. This file can also be sent to other studios with whom you are working.

```

#
# resolution.conf
#
# This files defines the resolution available to the program.
#
# There is a copy of this file in /usa/etc for Harmony/Opus or in
# the <Application Folder>/etc for Solo/Storyboard
#
# You may copy this file in /USA_DB/jobs/your_jobs for job's specific resolutions
# or in /USA_DB/environments/your_environment for environment wide resolutions
# and modify it to add any resolution you need to use in many or all of your
# scenes.
#
#
# syntax:
# resolution <name> <x> <y> [custom] [fps <fps>] [<fov>]
#
# The "custom" keyword means that this resolution was created by a user.
# The "fps" keyword can be followed by an integer to specify the number of
# frames per second.
# <fov> can be an angle in degrees, "V" to signify vertical fitting, or "H" to
# signify horizontal fitting. If unspecified, horizontal fitting is used.
#

default NTSC
resolution HDTV      1920 1080 fps 24 H
resolution film-1.33 2048 1536 fps 24 H
resolution film-1.66 2048 1234 fps 24
resolution NTSC      720  540 fps 24 V
resolution PAL        768  576 fps 25 V
resolution low        360  270 fps 24 41.112

```

Below is the resolution.xml file created by Harmony.

```

1  <!DOCTYPE resolutions>
2  <!--This file defines the scene resolutions available to the program.-->
3  <!--The default version of this file can be found in "<Application Folder>/etc" -->
4  <!--You may copy this file to /USA_DB/jobs/your_job for job specific resolutions-->
5  <!--or /USA_DB/environments/your_environment for environment wide resolutions.-->
6  <!--You may add any resolution to this file that you frequently use in your scenes.-->
7  <!---->
8  <!--The syntax follows standard xml format, which each tag followed by its value.-->
9  <!--The "custom" keyword means that this resolution was created by a user.-->
10 <!--The "FPS" keyword specifies the number of frames per second.-->
11 <!--The "fovFit" specifies the field of view. It is either vertical, horizontal, or custom, with the latter expressed-->
12 <!--as an angle in degrees that specifies a custom field of view. If unspecified, horizontal fitting is used.-->
13 <!--The "projectionType" is either "perspective" or "orthographic". If unspecified, a perspective projection is used.-->
14 <resolutions>
15   <default name="MyTest"/>
16   <resolution FPS="24" fovFit="horizontal" projectionType="perspective" resX="1920" resY="1080" name="HDTV"/>
17   <resolution FPS="24" fovFit="vertical" projectionType="perspective" resX="1920" resY="1080" name="HDTV_Vertical"/>
18   <resolution FPS="24" fovFit="horizontal" projectionType="perspective" resX="2048" resY="1536" name="film-1.33"/>
19   <resolution FPS="24" fovFit="horizontal" projectionType="perspective" resX="2048" resY="1234" name="film-1.66"/>
20   <resolution FPS="24" fovFit="vertical" projectionType="perspective" resX="2048" resY="1234" name="film-1.66_Vertical"/>
21   <resolution FPS="24" fovFit="vertical" projectionType="perspective" resX="720" resY="540" name="NTSC"/>
22   <resolution FPS="25" fovFit="vertical" projectionType="perspective" resX="768" resY="576" name="PAL"/>
23   <resolution FPS="24" fovFit="custom" customFov="41.112" projectionType="perspective" resX="360" resY="270" name="low"/>
24   <resolution custom="true" FPS="24" fovFit="horizontal" projectionType="perspective" resX="1929" resY="1080" name="MyTest"/>
25 </resolutions>
26

```

Managing Jobs

Within each environment is a list of jobs. These jobs contain all the segments for your animated sequence. If you are creating a weekly television series called **The Show**, you could name your job **show_ep_06** (**the_show** would be the name of your environment).

If each episode was composed of 100 animated shots, each job would contain 100 scenes.

Each job must have a unique name. You cannot have two jobs with the same name, even if they appear in two different environments. On the server, all the jobs are contained in the same folder.

As you continue working on your animation project, you may want to update the status of the jobs in your environment. This status can display one of three things:

- The stage the job has reached
- When the job will be vectorized
- When the job will be rendered

As you complete your animation project, you can update a job's status to reflect where it is in the overall production process. You can classify jobs as being "In Production" or "Completed".

- **In Production:** The job is still a work in progress. The other nodes can still access this job.
- **Completed:** The job is finished. The Harmony database still has all the job's components (scenes, elements, drawings), but the job neither appears nor is accessible from the Harmony applications.

In most cases, you would mark a job as "Completed" after it has been finalized (inked, painted, rendered) and transferred to a medium, such as Blu-ray, or sent to post-production.

You can change a job's status from "Completed" to "In Production" at any time to continue working on it.

If you want to remove a job and its data from the Harmony database and archive it, you can export the job from Control Center.

Before you send a job's scenes to be vectorized or rendered, you can change the job's priority level in the processing queue. Increasing a job's priority lets the system process it before other jobs in the processing queue.

Use the Choose New Priority dialog box to change a job's rendering and vectorization queue priority. The priority is set using a sliding scale where 0 is the highest priority and 10 is the lowest.

For example, if job B is before job A in the queue, you can change the priority, so job A is processed first.

Changing a job's priority does not affect vectorizing or rendering jobs that are already sent in the queue. It will only affect jobs that are sent after making the change. If you want to change a job's priority after it has been sent to the queue, use the Change Priority button in the Queue window.

You should only delete jobs that you no longer need or that have already been exported to an archive (using the Export command available in the Admin menu).

When you delete a job, the following components are permanently removed:

- Scenes
- Elements
- Drawings
- Database information associated with the selected job
- Palettes stored under the selected job

Before you delete a job:

- Make sure no one else is currently using the job. Failure to do this may result in file corruption and loss of your work.
- Wait until everyone is offline. This ensures no one can open the data files while you delete them.

IMPORTANT: You cannot archive a job by deleting the job. If you want to archive a job, you should export it to a new location where it can be stored permanently.

Changing the job's stage from In Production to Completed only hides the job in the Control Center window; all the associated files with the job are still on your system.

NOTE: You cannot delete a job if it still contains scenes.

How to create a job

1. In the Environments section, select the project in which you want to create a job.
2. Do one of the following:
 - From the top menu, select **Job > Create**.
 - Right-click in the Jobs section and select **Create**.

The Create Job dialog box appears.

3. In the Name field, type the name of the job you want to create.

The job name is alphanumeric and can include underscores (_), but no spaces or other special characters. The job name is case-sensitive.

4. In the TD menu, select a technical director (TD). You must select a technical director to create the job.

A TD is usually the person who oversees the animation project and makes sure the work is done properly. Select the person who most closely resembles this definition. If you do not have a particular user for the task, you can simply assign **usabatch**.

When you create your Harmony users, you can label a user as a technical director (TD).
5. In the ATD menu, select an assistant technical director (ATD). You must select an assistant technical director to create the job. If you do not have an ATD, select the same person for the TD and ATD jobs.

In some studios, the responsibilities of the technical director can be shared by more than one person. This second person is the ATD.

The technical director and assistant technical director you select appear in the Scenes list for each scene of the job.

6. In the Approval menu, select how Harmony will mark the various stages the scenes will pass in your production schedule.
 - ▶ **Automatic:** When you work on your scenes, Harmony automatically approves their status at each stage
 - ▶ **Manual:** When you work on the scenes, the technical director or the assistant technical director must approve their status at each stage using the Change Stage command (available in the Scene menu).
7. Drag the slider to adjust the priority. 0 = the highest priority for processing through the Vectorize or Render queue and 10 = a priority of 10 is the least important. Items with higher priorities pass in front of other projects with lower priorities in the Vectorize and Render queues even if there is already a queue processing.

If you do not know what priority to assign to your project, you can leave it at 5. You can always change it later.

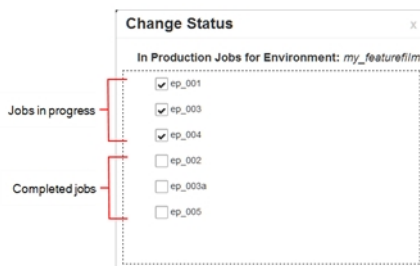
8. Click **OK**.



Control Center adds your new job to the selected environment and it appears in alphabetical order in the Jobs list.

How to change the stage of a job and view the list of completed jobs

1. In the Environments section, select an environment.
2. Do one of the following:
 - ▶ From the top menu, select **Job > Change Stage**.
 - ▶ Right-click in the Jobs section and select **Change Stage**.

The Change Stage of Jobs window appears.



3. Select the jobs you want to change the stage.
 - ▶ If you want to change a job from **In Production** to **Completed**, select the jobs in the In Production list.
 - ▶ If you want to change a job from **Completed** to **In Production**, select the jobs in the Completed list.
4. Click one of the Change buttons to change the job's status.
 - ▶ Click the Change to Completed  button to change a job that is in production.
 - ▶ Click the Change to In Production  button to change a job that is completed.
5. Click **OK**.

How to change a job's priority

1. In the Environments section, select the environment containing the job you want to change the priority for.
2. In the Jobs section, select the job whose priority you want to change.
3. Do one of the following:
 - ▶ From the top menu, select **Job > Change Priority**.
 - ▶ Right-click in the Jobs section and select **Change Priority**.

The Choose New Priority dialog box appears.

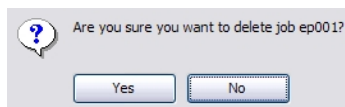


4. Drag the slider to adjust the priority. 0 = the highest priority for processing through the Vectorize or Render queue and 10 = a priority of 10 is the least important. Items with higher priorities pass in front of other projects with lower priorities in the Vectorize and Render queues even if there is already a queue processing.
5. Click **OK**. When you send this job to be vectorized or rendered, it will have this new priority in the processing queue.

How to delete a job

1. In the Environments section, select the environment containing the job you want to delete.
2. In the Jobs section, select the job you want to delete.
3. Do one of the following:
 - ▶ From the top menu, select **Job > Delete**.
 - ▶ Right-click in the Jobs section and select **Delete**.

The Confirm dialog box appears.



4. Click **OK**.

Managing Scenes

After you create a scene, you can view the corresponding elements and drawings in the Control Center window. When you select the environment and the job, the corresponding scenes for the selected job appears in the Scenes list in the Control Center window.

For each scene in your job, you must create a unique exposure sheet to lay out the drawings, camera effects, audio tracks, and other special effects for that scene.

When creating your scene, you must select the path where you want to store the scene data and where you want the new scene to appear in the Scenes list. You can create a single scene or create multiple scenes all at once.

You do not have to enter the word "scene" when entering scene names. The system automatically adds **scene-** in front of the name. For example, when you type "3" in the Scene Name field, the scene name automatically displays as "scene-3" throughout the file system. The scene name will have "scene-" as a prefix, but that will only be visible when looking at the scene on the file system. The scene will appear without this prefix in all the Harmony applications.

When you delete a scene, you not only remove the scene from the Control Center window, but you also permanently remove all the information associated with the scene including:

- Exposure sheet (and all associated versions)
- Elements
- Drawings
- Database information
- Any palettes stored in that scene's palette library

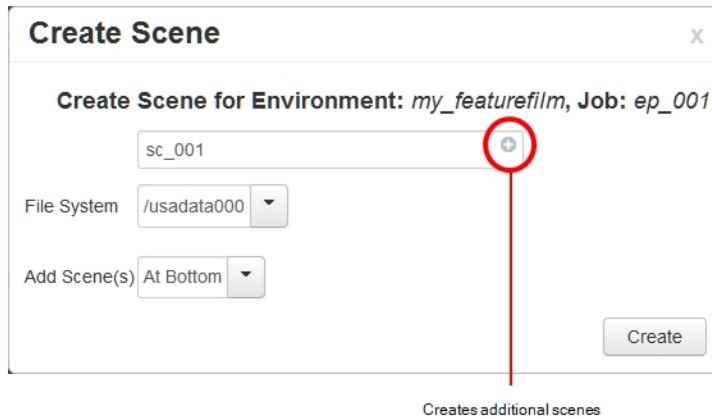
Before you delete a scene:

- Make sure that you really want to remove all this information from the system
- Are you going to use the scene in the future?
- Do you need to archive the scene for future use?
- Make sure no one else is currently using the scene.
failure to do this may result in file corruption and loss of your work.
- Wait until everyone is offline. This ensures no one can open the scene while you delete it.

How to create a scene

1. In the Environments section, select the environment containing the job you want to add scenes in.
2. In the Jobs section, select the job you want to add scenes in.
3. Do one of the following:
 - In the Scene section, select **Scene > Create**.
 - Right-click in the Scenes section and select **Create**.

The Create Scene dialog box appears.



4. Click in the Scene Name(s) field and enter the name for the first scene you want to create.
5. Press the Enter/Return keyboard shortcut to move onto the next scene.
6. Enter the name of the next scene you want to create.

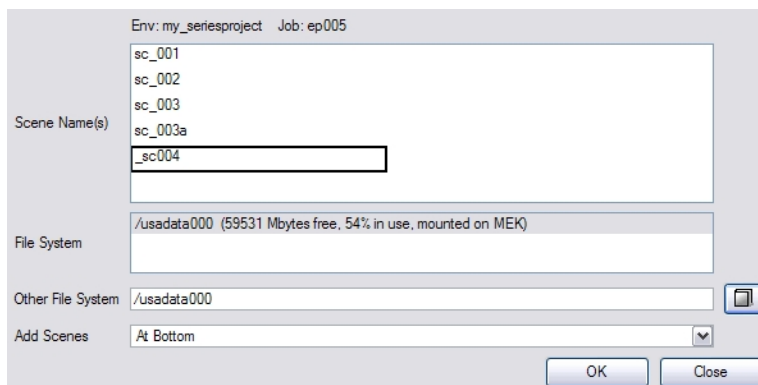
NOTE:

When creating a new scene or renaming a scene, the scene's name cannot exceed 23 characters.

When creating scenes in Control Center, you should enter the scene names exactly as they appear on the actual animation. This ensures that the information in your environment is consistent with the actual animation.

The job and scene names are alphanumeric and can include underscores (_), but no spaces, or other special characters. The environment name is case-sensitive.

7. Repeat the previous steps until you have named all the scenes you want to create.



8. In the File System list, click the path where you want to store the files.
 If you do not see the desired path in the list, specify a different path in the Other File System field.
 If you are unsure which disk drive to select, consult your technical director or system administrator.
 The information in the File System list displays:
 - ▶ Available drives on which you can store new scenes

- ▶ Space that is currently available (in megabytes)
- ▶ The percentage of space the drives are currently using

NOTE: Although you can add as many scenes as you wish, you can only select one path at a time. Therefore, Control Center stores all scenes you create in one session at the same place (same path).

9. Select where you want to place the scene in the Scenes list from the Add Scenes menu. These are the options:
 - ▶ **At Bottom:** Places the new scenes at the bottom of the list
 - ▶ **At Top:** Places the new scenes at the top of the list
 - ▶ **Before Selected:** Places the new scenes before the selected scene
 - ▶ **After Selected:** Places the new scenes after the selected scene
 - ▶ **Name Sort:** Arranges the new scenes alphabetically.

NOTE: To use the After Selected and Before Selected options, you must select another scene from the Scene list in the Control Center window.

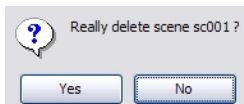
10. Click **OK**.

The new scene is created and displayed in the Scenes list. If you do not want to create the scene, click **Cancel**.

How to delete a scene

1. In the Scenes list, select the scene name you want to delete.
2. Select **Scene > Delete** or right-click anywhere in the Scenes list and select **Delete**.

The Confirm dialog box appears.



3. Click **Yes** to delete the scene and all its related information.

The scene name and all its associated files are deleted.

Updating Scenes

Your scenes contain the animation sequences you are working with, which allows you to manipulate them and their associated files to achieve the desired effect.

You can:

- Move a scene

- Rename a scene
- Change a scene's priority
- Change a scene's stage
- Change the sequence of a scene
- Clear scenes from Control Center
- Copy an exposure sheet to another scene
- Send scenes to the render queue

When you create a scene, it and its associated files are stored on one drive. If you find you are running out of space, you can move a scene to another drive. However, you can consolidate all the scenes for a particular job in a single directory allowing you to find related information quickly. You may also want to file your scenes in specific directories, creating a customized directory system. The Move command lets you move scene data from one file system to another.

Before you move a scene's data:

- Make sure no one else is currently using the scene's data. Failure to do this may result in file corruption and loss of your work.
- Wait until everyone is offline. This ensures no one can open the data files while you move them.

As you work on your scenes, their nature and contents may change and the name you gave the scene when you began the project may no longer reflect its contents. In this case, you can rename the scene to more accurately reflect its contents.

Before you rename a scene:

- Make sure no one else is currently using the scene.
Failure to do this may result in file corruption and loss of your work.
- Wait until everyone is offline. This ensures no one can open the scene while you rename it.

You can change the scene's priority level in the processing queue. Increasing a scene's priority lets the system process it before other scenes in the processing queue.

Use the Choose New Priority dialog box to change a scene's rendering and vectorization queue priority. The priority is set using a sliding scale where 0 is the highest priority and 10 is the lowest. If a scene has already been sent to the queue changing the priority at this point will not affect its priority in the queue. Changes will only be applied next time it is sent to the queue. To change a scene's priority after it's been sent to the queue, use the Change Priority button in the Queue window.

For example, If scene B comes before scene A in the queue, you can change the scene's priority so that scene A will be processed first.

The Change Status command allows you to change the approval stage name of a selected scene that is in Manual approval mode. You can also create customized approval stages that reflect the approval process in your production environment.

A scene's status is a method of tracking its progress in your production; the scene's current status does not stop you from advancing the scene to other stages.

Changing a scene's status and making manual approvals allows you to assign and change a scene's approval stages to keep track of its current status. For example, if you have a scene whose drawings are being scanned, you will mark it as the Scan stage. After you begin adding colour to these line drawings, you can change the

scene's stage to Paint. If the selected scene has an automatic approval policy, the Change Stage command will be inactive in the Scene menu. To change a scene's status, you must ensure that the approval policy is set to Manual.

You can change the sequence of scenes in your job, which affects the order in which the scenes appear in the job throughout the system. You can place a scene anywhere in the Scenes list or you can sort them alphanumerically.

If you must restart a scene from scratch, you can completely erase a scene's exposure sheet. When you clear a scene, you delete all exposure sheet database information and reset the scene as if it were completely new. You are only deleting the files from the database; Control Center does not actually delete any image files (drawings, scan, final frames). If you have questions concerning the contents of a scene, you should contact the technical director responsible for the scene in question.

If you must clear a scene from Control Center, make sure no one else is currently using the scene's data. If you clear a scene that someone else is working on at that moment, you run the risk of corrupting the files and losing work.

If you must clear a scene, you should wait until everyone is offline to ensure that no one can open the data files while you clear them from Control Center.

When you have two scenes with similar exposure sheet information, instead of entering the information twice, you can:

1. Enter the information for one exposure sheet.
2. Copy it to the other scene.
3. Modify the second exposure sheet as needed.

The Copy command lets you copy an existing exposure sheet from one scene into another scene. You can then modify the copied exposure sheet using Harmony.

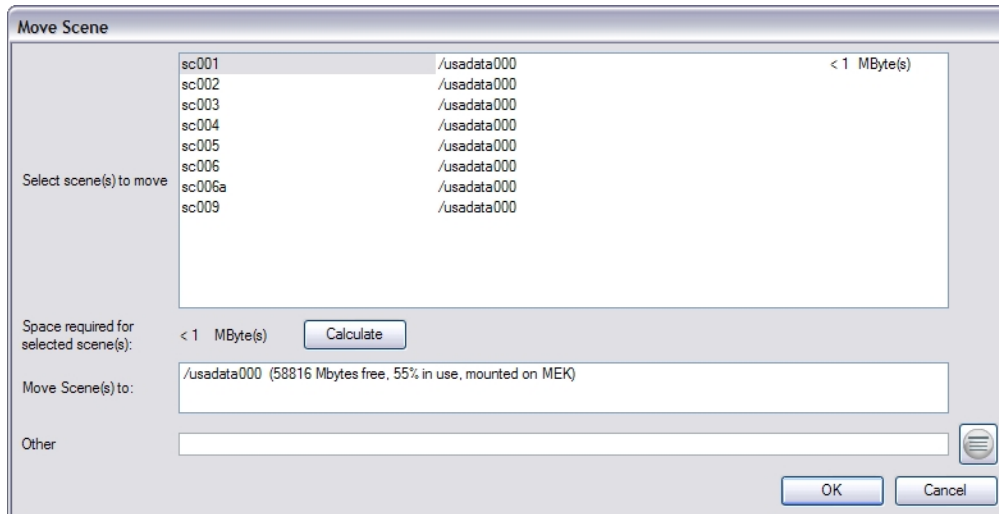
When you are ready to send a set of scenes for rendering, you can use the **Send to Rendering** command. This command allows you to send one or more scenes for rendering to the Batch Processing machine.

You can also use Harmony to render scenes, but since you must open each scene individually in Harmony, you can only send one scene to render at a time.

How to move a scene from one directory to another directory

1. In the Scenes section, select the scenes you want to move.
2. Do one of the following:
 - From the top menu, select **Scene > Move**.
 - Right-click anywhere in the Scenes list and select **Move**.

The Move Scene dialog box appears.



3. In the Select Scene(s) to Move field, select the scenes you want to move from their current directory.
4. Click **Calculate** to know how much hard disk space your selection requires.
5. In the Move Scenes To list, select the directory where you want to move the scene. If it does not appear in the list, enter the directory path in the Other field.

The Control Center node automatically checks the amount of free space for each directory and compares it to the size of the scene you want to move.

If there is not enough disk space on a particular drive/mount point to store the scene, the directory displays a not "enough space message". Choose another disk from the list.

6. Click **OK**.

How to rename a scene

1. In the Scenes section, select the scene to rename.
2. Do one of the following:
 - From the top menu, select **Scene > Rename**.
 - Right-click anywhere in the Scenes list and select **Rename**.

The Rename Scene dialog box appears.



3. In the Enter New Scene Name field, type the new name for the scene and click **OK**. Try to keep scene names brief. It is recommended that you use no more than 23 characters.

NOTE: Use lower case letters if these scenes may be used with a Windows workstation.

NOTE: When creating a new scene or renaming a scene, the scene's name cannot exceed 23 characters.

How to change a scene's priority

1. Select the environment, the job and the scene you want to prioritize.
2. Do one of the following:
 - ▶ From the top menu, select **Scene > Change Priority**.
 - ▶ Right-click anywhere in the Scenes list and select **Change Priority**.

The Choose New Priority dialog box appears.



3. Drag the slider to adjust the priority. 0 = the highest priority for processing through the Vectorize or Render queue and 10 = a priority of 10 is the least important. Items with higher priorities pass in front of other projects with lower priorities in the Vectorize and Render queues even if there is already a queue processing.
4. Click **OK**.

The new scene priority appears in the Scenes list in the Priority column.

How to change a scene's status

1. In the Scenes section, select a scene.
2. Do one of the following:
 - ▶ From the top menu, select **Scene > Change Status**.
 - ▶ Right-click anywhere in the Scenes list and select **Change Status**.

The Change Status dialog box appears.



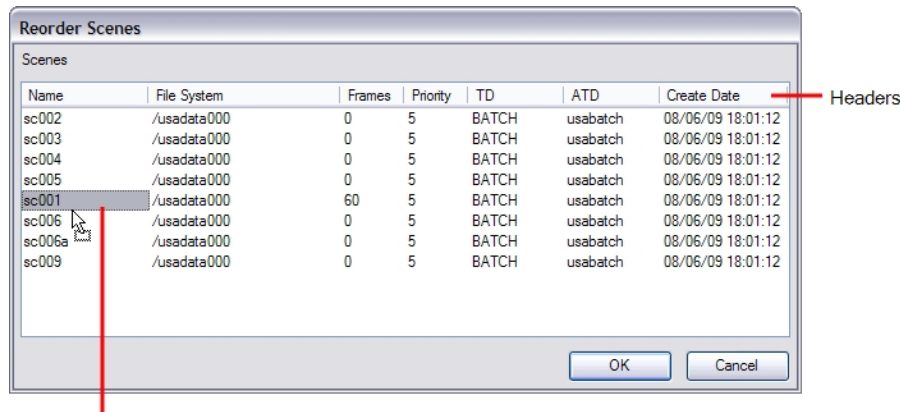
The current status of the selected scene appears in the From Stage field.

3. Select the status you want to apply to the current scene from the To Stage menu.
4. Click **OK**.

How to resequence a scene

1. Select the job whose scenes you want to re-sequence from the Jobs panel.
2. Do one of the following:
 - From the top menu, select **Scene > Reorder**.
 - Right-click anywhere in the Scenes list and select **Reorder**.

The Reorder Scenes dialog box appears.



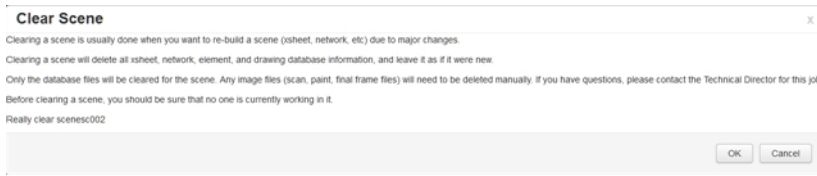
Drag the scenes up or down to reorder them manually.

3. Select the reordering method by clicking on the column headers or dragging the scenes up or down.
4. Once the scenes are ordered, click **OK**.

How to clear a scene

1. Select the environment, job or scene you want to clear.
2. Do one of the following:
 - From the top menu, select **Scene > Clear**.
 - Right-click anywhere in the Scenes list and select **Clear**.

The Confirm dialog box appears.



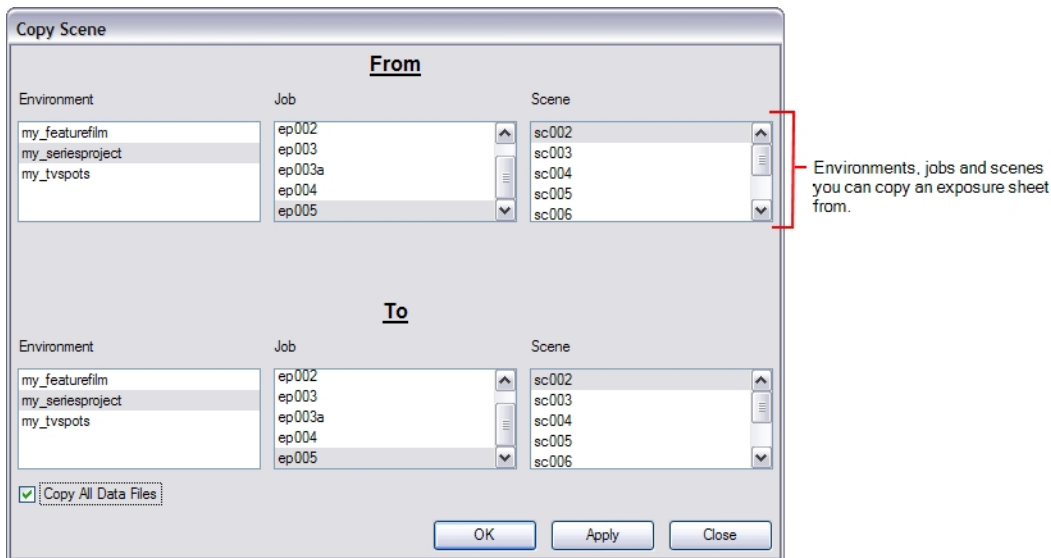
3. Click **OK**.

The Scene list refreshes itself and displays blank elements and drawings lists, showing that the Control Center node has deleted the exposure sheet for the scene you cleared.

How to copy an exposure sheet to another scene

1. Select the environment and the job from the Control Center window.
2. Do one of the following:
 - ▶ From the top menu, select **Scene > Copy**.
 - ▶ Right-click anywhere in the Scenes list and select **Copy**.

The Copy Scene dialog box appears.



3. Select the environment, job, and scene to copy from the exposure sheet from the From panel.

The lower half of the dialog box displays the environments, jobs, and scenes to which you can copy the exposure sheet.

4. Select the environment, job, and scene where you want to copy the selected exposure sheet to the To panel.
5. If you want to copy the associated animation data files with the scene's exposure sheet, select the **Copy All Data Files** option. Harmony will place a copy of the animation data in the target scene's storage directory.
6. Click **OK**.

7. If the scene you are copying to already has an exposure sheet, a Confirm dialog box appears to make sure you want to replace the existing exposure sheet.
 - Click **Yes** if you want to copy over the existing exposure sheet.
 - Click **No** to cancel the copy or to select a different scene.

The Copy Xsheet dialog box disappears. You can view and modify the copied exposure sheet using Harmony Advanced or Harmony Premium.

How to send a group of scenes to the render queues

1. In the Control Center window, select the environment, job and scenes that you want to send to the Render queue for rendering.
2. Do one of the following:
 - From the top menu, select **Scene > Send to Rendering**.
 - Right-click anywhere in the Scenes list and select **Send to Rendering**.

The Render Network dialog box appears.

3. Select the frames you want to render:
 - **All Frames**: Sends all the frames in the scene to be rendered.
 - **Selected Frames**: Sends a range of frames to be rendered. You can only send a range of frames if you selected one scene.
4. Select the **Chunk** option if you want to split the frames into sets of frames. Enter the number of frames you want in each chunk in the Size field.
5. Select the **Version** of the Scene you want to render.

6. Select the camera you want to use to render the scene's images from the Camera menu. These are the cameras you created in your exposure sheet in Harmony Advanced or Harmony Premium.
7. If you want to create a Field Composite, select the checkbox to refine your selection.
 - ▶ **Add Pulldown:** Uses the 3:2 pulldown technique.
 - ▶ **Automatic Combine:** Combines even and odd fields on a scene's image.
 - **Second Field First:** Always start with the second field before combining with the first field.
8. If you did not select the Batch Composite Options option, select the **Preview** option to see the render once it is completed.
9. Click **OK**.

To verify that the scenes have been sent for rendering, display the Render queue.

Viewing Elements and Drawings

You must use Harmony Advanced or Harmony Premium, instead of Control Center, to add elements or drawings to your environment. After you add them in the exposure sheet and save the source, Control Center displays them in the Elements and Drawings panels.

The screenshot shows the Harmony Control Center interface with the following panels:

- Environments:** A list box containing 'my_featurefilm', 'my_seriesproject', and 'my_tvspots'.
- Jobs:** A list box containing 'ep001', 'ep002', 'ep003', 'ep003a', 'ep004', and 'ep005'.
- Scenes:** A table with columns: Name, File System, Frames, Priority, TD, and ATD.

Name	File System	Frames	Priority	TD	ATD
sc002	/usadata000	0	5	BATCH	usabatch
sc003	/usadata000	0	5	BATCH	usabatch
sc004	/usadata000	0	5	BATCH	usabatch
sc005	/usadata000	0	5	BATCH	usabatch
sc006	/usadata000	0	5	BATCH	usabatch
sc006a	/usadata000	0	5	BATCH	usabatch
sc009	/usadata000	0	5	BATCH	usabatch
- Elements:** A table with columns: Name, Folder, Type, and Scan.


Name	Folder	Type	Scan
monster	monster	None	Grayscale
iseult	iseult	None	Grayscale
Tomy	Tomy	None	B&W
gatecolor	gatecolor	None	Color
it	it	None	B&W
- Drawings:** A table with columns: Name, Stage, and State.

Name	Stage	State
1	Paint	Pending
2	Paint	Pending

You create the environment, job, and scene in the Control Center.

The Control Center reads the scene's Stage files as current version to retrieve the element and drawing information.

When you select a scene in the Scenes list, all of the elements associated with the scene (background, characters, etc.) appear in the Elements and Drawings lists. Control Center retrieves these components from information you previously entered in the exposure sheet.

You can click the Expand/Collapse  buttons to show or hide the Elements and Drawings sections.

Exporting and Importing Data

With Harmony, you can import and export data.

You can use Control Center's export utility to migrate scenes from your system for archival purposes or third parties, and you can use the import utility to integrate scenes into a Harmony environment.

You can use Control Center's export utility to copy scene data. After Harmony copies the exported data to a temporary directory, you can move the archived data to your storage device (for example, a CD or tape drive).

Harmony creates two files during export:

- **README.txt**: Includes export statistics, such as creation date and user ID
- **IEContents.dat**: Includes export parameters

In Linux, exporting your scenes using the Export command makes Harmony copy scene information and link information to the temporary export directory you selected. Therefore, you must retrieve the animation data from your server and copy it, along with the database information, to your storage device.

NOTE: You can compress the export package to make it transportable. However, it will resolve hard links and symbolic links, which might be contrary to your export options.

Copying the exported data to a storage device is a two-fold process. Copy the exported animation files to a file on the storage device. Then remove the temporary export data from your system.

If the imported files are compressed, you must decompress them to a temporary directory before you can import them into Harmony. If you don't know how to decompress these files, see your system administrator.

If you have any problems importing or exporting in Harmony, review the instructions to make sure you have followed them completely. If you continue to have problems, consult the following list to troubleshoot common import and export problems.

Problem: Import or Export Not Successful

If the transfer is not successful, an error dialog box appears to describe the problem. The most common reason for a failed transfer is due to your current network permissions. See your system administrator for help.

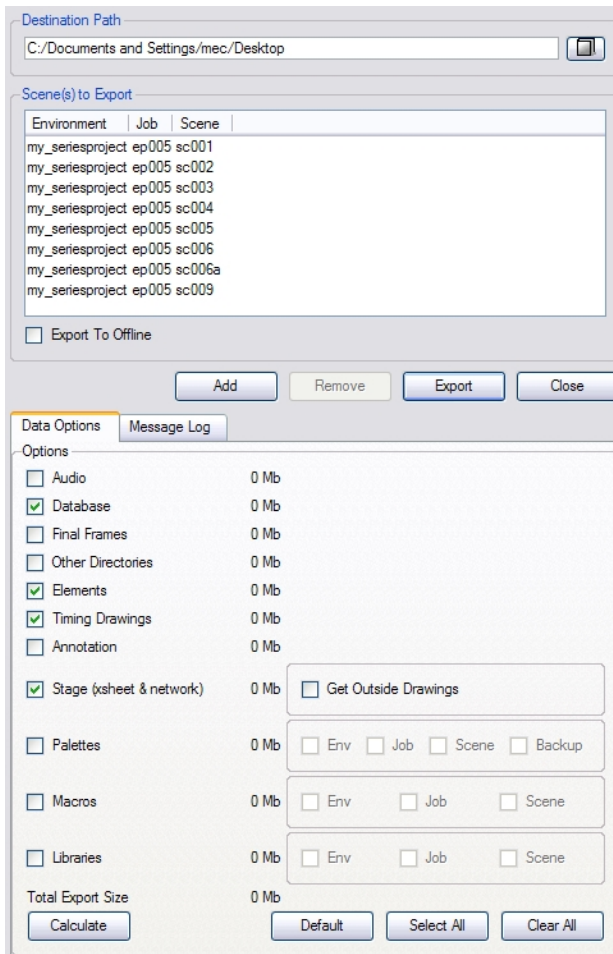
If the transfer fails in the middle of the process, the files that were imported or exported may be corrupt or incomplete.

- For a failed import, use Control Center to delete the scene.
- For a failed export, manually delete the incomplete export folder.

If you click the Message Log tab, you can see more detailed descriptions, including error messages.

How to export data

1. Launch Control Center. To learn more about the different launch methods, see [Starting Control Center on page 7](#).
2. From the top menu, select **Admin > Export**.
The Export Scene(s) dialog box appears.



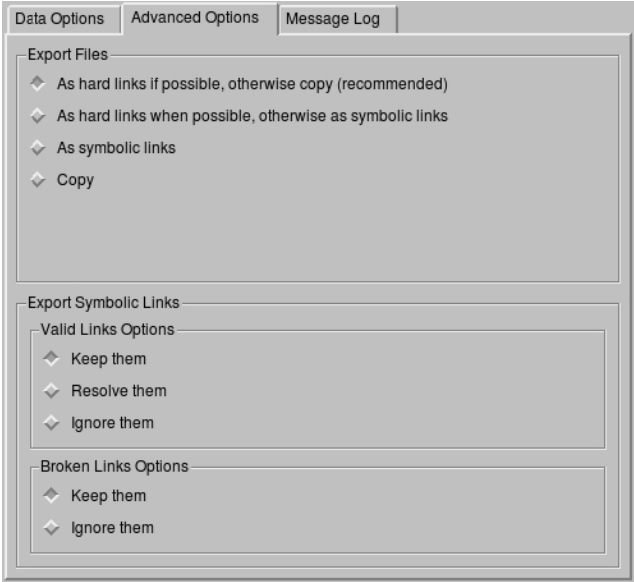
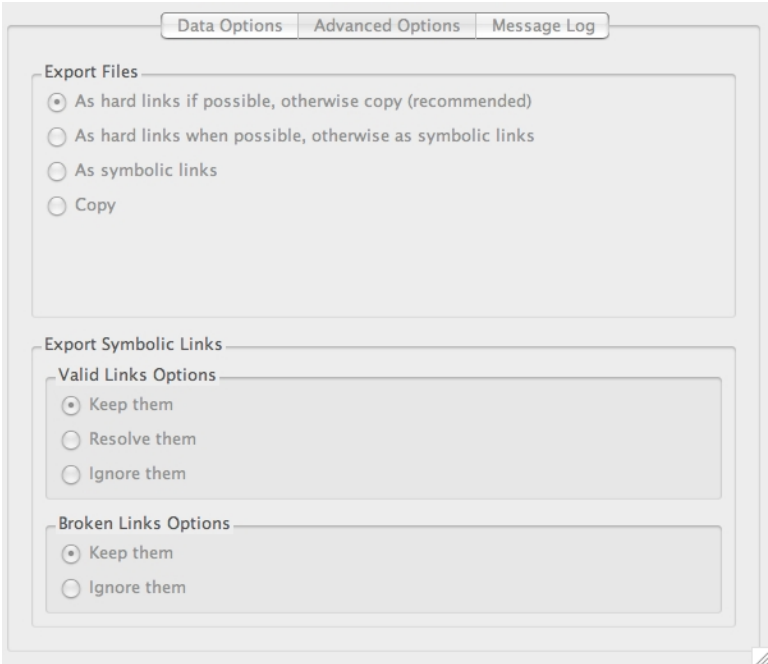
3. Enter the path where you want to export the files. You can also use the **Browse** button to select the path and create a folder. The destination must be an existing empty folder or a new folder that will be created during the export process.
4. Click **Add** to select the scenes that you want to export from the Harmony database. You can select a job to select all the scenes in the job. The scenes you select will appear in the list.
5. Select one or more scenes and click **Remove** to remove scenes from the export list.
6. In the Data Options tab, select what you want to export:

Parameter	Description
Audio	Exports the Audio directory.
Database	Selected by default, this option exports the elements in the scene. If you select this option and deselect the Elements option, you can access the elements from the Element Manager in the Control Center, but their drawing and bitmap files will not be included. The list of available versions in the scene is also exported. It is not possible to open a scene if this is not selected for export.
Final Frames	Exports the directory that contains the final, rendered frames.

Element	Selected by default, this option exports the contents (drawing and bitmap files) of the Element directories.
Timing Drawings	Selected by default, this option exports the contents of the Timing directories.
Other Directories	Exports all other directories and files in the scene's data structure.
Annotation	Lets you export the different drawings created while drawing in the Annotation columns and imported images.
Harmony	<p>Selected by default, this option exports the Control Center directory, which contains the Control Center files for each scene you export. These files are necessary if you want to reuse the exposure sheet (timing) and the node structure from the original scene.</p> <p>If this option is selected, you can select the Get Outside Drawings option to copy drawings into the scene folder that is referred to by the Timing columns and their Element (Drawing) nodes.</p>
Palette	<p>Exports the palette-library directories. Decide if you want to export the palette-library from the environment, job or scene level. When you select a level, the palette-library in lower-level directories will also be exported.</p> <p>This also exports the palette-list file which is necessary for the scene to know which palettes to use. In most cases, you should select this option as well as the Scene option.</p>
Macros	Exports the macros (customized effect and node connections) that were created and stored in the environment, jobs or scenes to be exported. This is necessary if you have legacy scenes with macros.
Library	Exports templates created at the selected levels.

7. In the Advanced Options tab:

- ▶ **Windows:** Due to constraints in the operating system, you do not have any choices on the Advanced Options tab. In Linux, you can make the following selections.
- ▶ **(Mac OS X and Linux):** Select how you want to package the exported scene. The choices you make here are related to the size of the export package as well as the speed of the export process. In Linux, you can make the following selections.



▶ Select one of the following options in the Exporting Files section:

Parameter	Description
As hard links if possible, otherwise copy	Speeds up the export process by making hard links to the original files on the file system. Hard links keep disk space usage to a minimum and ensure a quick export process. If it is not possible to create hard links (because the links cross file systems, for example), the entire contents will be copied to the destination directory, which will be a slower process that will take up more space on your file system.
As hard links when possible, otherwise symbolic links	Ensures a quicker export process. However, if symbolic links are used and the original file is deleted, the symbolic link will be broken.

As symbolic links	Exports the scene using symbolic links to the original scene files (when importing, imports the scene using symbolic links to the export directory). While this process will reduce the size of the export directory, if the original file is deleted, the symbolic link will be broken.
Copy	Copies all scene data to the export location. This produces the largest export package and therefore takes the longest to complete. However, it is the simplest method.

8. In the Valid Links Options section, select one of the following options:

Parameter	Description
Keep them	Maintains symbolic links.
Resolve them	Removes symbolic links, replacing them with the actual files. When you use this option, the export package will contain real files, rather than symbolic links.
Ignore them	Does not include valid symbolic links in the export package.

9. In the Broken Links Options section, select of the following options:

Parameter	Description
Keep them	Keeps symbolic links to missing files. When the missing files are placed in the path searched by the symbolic link, broken links will be valid again.
Ignore them	Does not include broken symbolic links in the export package.

10. Click **Calculate** to get a preview of the size of your export package.

11. Click **Export**.

The selected files and components are exported. Use the Message Log tab to view messages generated during the export process.

Unlike Windows, where the database information and scene data have been copied to a different directory, Linux creates a set of links to the data. You must use additional Linux commands to retrieve the animation data pointed to by the links.

How to export your files to a storage device on Linux

1. Open a Linux shell and log in to the machine that connects to the storage device.
2. Copy the exported files using links from the source directory to the selected destination file. To export to a file on a storage device, type the following command in a shell:

```
tb_backup_export_data -from [source_directory] -to [destination_file]
-writetarfile
```

- ▶ Where [source_directory] is the folder where the scene was exported to.
- ▶ Where [destination_file] is the file that will be created by the tb_backup_export_data script.

- After a successful copy of the exported data, remove the temporary export directory using the following command:

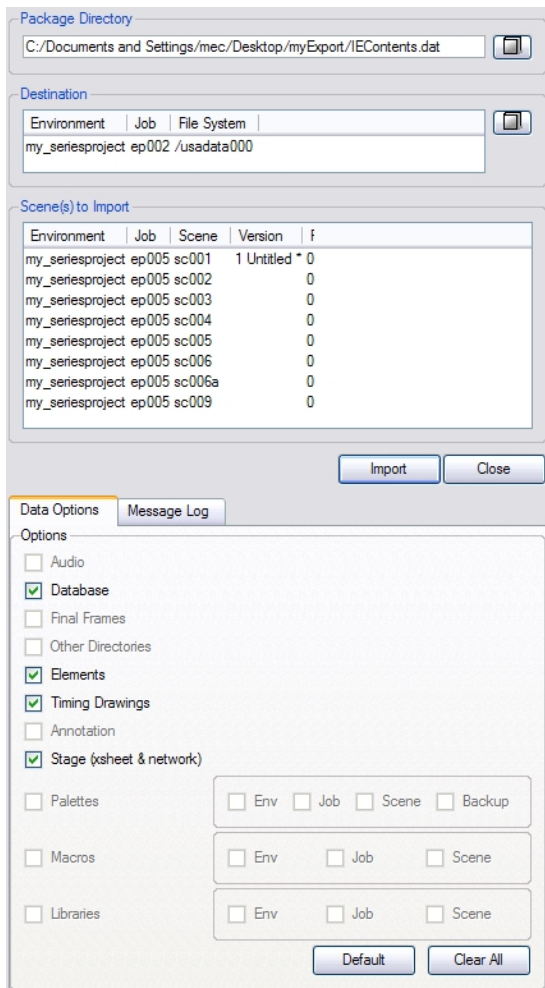
```
tb_remove_export_data [export_directory]
```

- Where [export_directory] is the folder where the scene was temporarily exported to before it was copied to the file or storage device.

How to import files into Control Center

- Select **Admin > Import**.

The Import Scene(s) dialog box appears.



- Any supported Harmony file can be imported, including **IEContents.dat** files. The **IEContents.dat** file includes database and scene file information. Specify the path of **IEContents.dat** for the scene(s) you want to import.
- Click **Browse** to select the environment, job and file system where you want to place the imported scene.
- If you want to import only some of the scenes in the Scenes to Import list box, select the scenes. If no scenes are selected, all scenes will be imported.

5. In the Data Options tab, select what you want to import.

Parameter	Description
Audio	Exports the Audio directory.
Database	Selected by default, this option exports the elements in the scene. If you select this option and deselect the Elements option, you can access the elements from the Element Manager in the Control Center, but their drawing and bitmap files will not be included. The list of available versions in the scene is also exported. It is not possible to open a scene if this is not selected for export.
Final Frames	Exports the directory that contains the final, rendered frames.
Element	Selected by default, this option exports the contents (drawing and bitmap files) of the Element directories.
Timing Drawings	Selected by default, this option exports the contents of the Timing directories.
Other Directories	Exports all other directories and files in the scene's data structure.
Annotation	Lets you export the different drawings created while drawing in the Annotation columns and imported images.
Harmony	Selected by default, this option exports the Control Center directory, which contains the Control Center files for each scene you export. These files are necessary if you want to reuse the exposure sheet (timing) and the node structure from the original scene. If this option is selected, you can select the Get Outside Drawings option to copy drawings into the scene folder that is referred to by the Timing columns and their Element (Drawing) nodes.
Palette	Exports the palette-library directories. Decide if you want to export the palette-library from the environment, job or scene level. When you select a level, the palette-library in lower-level directories will also be exported. This also exports the palette-list file which is necessary for the scene to know which palettes to use. In most cases, you should select this option as well as the Scene option.
Macros	Exports the macros (customized effect and node connections) that were created and stored in the environment, jobs or scenes to be exported. This is necessary if you have legacy scenes with macros.
Library	Exports templates created at the selected levels.

6. In the Advanced Options tab, select how you want to import the scene. Select one option in the Valid Links Options and the Broken Links Options section.
7. Click **Import**.
If the scene already exists, the Scene Exists dialog appears.
8. Click **Import Scene** for each scene or **Import All Scenes** to confirm your selection.

9. Use the **Message Log** tab to view messages generated during the import process.

If the name of the scene you are importing in Control Center is too long, you will be prompted with an error message stating that it will be truncated. A scene's name cannot exceed 23 characters.

If you are importing scenes that were exported from the Harmony Network, or worked on in Harmony Stand Alone, the system will try to retrieve the version name.

Control Center Commands

This section describes all the commands in the Control Center window.

Control Center Commands

The Control Center menu commands let you access the information about the application and quitting on Mac OS X.

Command	Action	Access Methods
About Toon Boom Harmony	Mac OS X: Displays product, version, licensing and copyright information.	
Quit	Mac OS X: Closes the Control Center window and ends the current session.	⌘ + Q.

File Commands

The File menu commands let you access the Log file and exit the application on Windows/Linux.

Command	Action	Access Methods
Exit	Windows/Linux: Closes the Control Center window and ends the current session.	Ctrl + Q
View Log	Lets you view errors and warning messages related to your actions during the current Control Center session.	

Environment Commands

The Environment menu commands let you manage the environments and queues.

Command	Action	Access Methods
Create	Opens a Create Environment dialog box, where you can enter a name for a new environment.	Right-click on the Environments list and select Create .
Delete	Lets you delete an environment from the database. You cannot delete an environment unless it is empty; delete all of the environment's scenes and jobs before activating this command.	Right-click on the Environments list and select Delete .
Change Asset Lock	Enables or disables the automatic Global Lock on the scenes under the selected Environment.	Right-click on the selected environment in the Environments list and select Change Asset Lock .
Vectorize Queue	Opens the Vectorize Queue dialog box	Right-click on the Environments list and select Vectorize Queue .

	where you can display the progress and prioritize the drawings that the system is converting to the TVG vector file format.	
Render Queue	Opens the Render Queue dialog box where you can monitor and prioritize the progress of the drawings that the system is rendering.	Right-click on the Environments list and select Render Queue .

Job Commands

The Job menu commands let you manage the jobs and their state.

Command	Action	Access Methods
Create	<p>Opens the Create Job dialog box where you can add a new job to the selected environment.</p> <p>Your job must have a name that is unique to the animation database (for example, you cannot have two jobs with the same name even if they exist in different environments; they are all in the same database).</p>	Right-click on the Environments list and select Create .
Delete	<p>Removes a job from the selected environment. When a job is deleted, its scenes, elements, drawings, palette library, and database information are permanently removed. If you want to archive a job, you should only delete the job after you have used the command to create the archive.</p> <p>Before you activate this command, verify that the selected jobs are not currently in use.</p>	Right-click on the Jobs list and select Delete .
Change Stage	Opens the Change Stage of Jobs dialog box where you can record the current stage of the environment's jobs in the production process. You can change the job from In Production to Completed , or from Completed back to In Production if you need to perform further work.	Right-click on the Jobs list and select Change Stage .
Change Priority	Opens the Choose New Priority dialog box where you can set the priority of the rendering and vectorizing tasks for one or more jobs. The priority is set using a sliding scale where 0 is the highest priority and 10 is the lowest.	Right-click on the Jobs list and select Change Priority .

Scene Commands

The Scene menu commands let you manage the scenes.

Command	Action	Access Methods
Create	<p>Opens the Create Scene dialog box where you can add one or more scenes to the selected job. You can also choose to:</p> <ul style="list-style-type: none"> • Add a scene from another file system and add it to your job. • Choose the position the scene will take within the job. 	Right-click on the Scenes list and select Create .
Copy	<p>Opens the Copy Scene dialog box where you can copy a scene's exposure sheet into another scene. You can select a source and destination scene in which to copy the Xsheet data.</p>	Right-click on the Scenes list and select Copy .
Delete	<p>Removes a scene from the database. Before you activate this command, make sure all users are logged out of Toon Boom Harmony and that no files are currently in use.</p> <p>When a scene is deleted, its exposure sheet, elements, drawings, palette library and database information are permanently removed. If you want to archive a scene, you should only delete the scene after you have used the command to create the archive.</p> <p>Before you activate this command, verify that the selected scenes are not currently in use.</p>	Right-click on the Scenes list and select Delete .
Move	<p>Opens the Move Scene dialog box where you can move one or more scenes and their associated files to a file location of your choice. The Move Scene command allows you to select one or more scenes and calculate the amount of space you will need at the new location to accommodate the moved scene.</p> <p>Before you activate this command, make sure all users are logged out of Toon Boom Harmony and that no files are currently in use.</p>	Right-click on the Scenes list and select Move .
Rename	<p>Opens the Rename Scene dialog box where you can enter a new name for the selected scene. Before you activate this command, verify that no users are using the scene, all users are logged out of Toon Boom Harmony and that no files are currently in use.</p>	Right-click on the Scenes list and select Rename .
Force Unlock	<p>Unlocks a scene was locked in Stage. Generally, a scene unlocks when it is closed by a user. However, if a computer crashes</p>	Right-click on the Scenes list and select Force Unlock .

	<p>while a scene is locked and in use, a scene may remained locked even if it is not open.</p> <p>An unlock confirmation message appears detailing the consequences of using this option.</p> <p>If you activated this command for more than one scene, you will be prompted for confirmation to unlock each scene separately.</p>	
Force Unlock Version	<p>Unlocks a version of a scene that has been locked by Stage. Generally, a scene unlocks when it is closed by a user, however if a computer crashes while a scene is locked and in use, a scene may remained locked even if it is not open.</p> <p>An unlock confirmation message appears detailing the consequences of using this option.</p> <p>If you activated this command for more than one scene, you will be prompted for confirmation to unlock each scene separately.</p>	Right-click on the Scenes list and select Force Unlock Version .
Force Checkin	<p>Checks in a scene that was checked out, but not checked back in.</p> <p>Use this command only in extreme cases. Otherwise, two versions of the same scene will be in use, which will cause conflicts.</p>	
Checkin	Checks in a scene that you checked out.	
Checkout	Checks out a scene. If a scene is already checked out, it is available as read-only and you cannot make any changes to it.	
Change Priority	<p>Opens the Choose New Priority dialog box where you can set the priority of the rendering and vectorizing tasks for one or more scenes. The priority is set using a sliding scale where 0 is the highest priority and 10 is the lowest.</p> <p>Activating this command affects all subsequent scenes you create. You can change the priority of a scene already sent to the batch processing queue by using the Change Priority button in the queue.</p>	Right-click on the Scenes list and select Change Priority .
Change Stage	Opens the Change Scene Stage dialog box where you can record the current stage of progress in a scene in an environment or a production.	Right-click on the Scenes list and select Change Stage .

	This command is inactive if the scene's approval policy has been set to Manual in the Change Approval Policy dialog box.	
Reorder	Opens the Reorder Scenes dialog box where you can change the sequence of the scenes in a job.	Right-click on the Scenes list and select Reorder .
Clear	<p>Deletes a scene's exposure sheet. Only exposure sheet files are deleted from the database, not image files.</p> <p>A delete confirmation message appears, detailing the consequences of using this option and requests that you contact your Technical Director if you are unclear about this procedure.</p> <p>Before you activate this command, make sure that all users are logged out of Toon Boom Harmony and that no files are currently in use.</p>	Right-click on the Scenes list and select Clear .
Send to Vectorize	Converts the Send to Vectorize command to convert the selected drawings to the TVG vector file format.	Right-click on the Scenes list and select Send to Vectorize .
Send to Unvectorize	Opens the Send Scenes to Unvectorize dialog box where you can convert a scene's vector drawings into bitmap drawings.	Right-click on the Scenes list and select Send to Unvectorize .
Send to Rendering	Opens the Composite dialog box where you can add one or more scenes to the rendering queue.	Right-click on the Scenes list and select Send to Rendering .

Element Commands

The Element menu commands let you vectorize and unvectorize the elements.

Command	Action	Access Methods
Send to Unvectorize	Opens the Send Elements to Unvectorize dialog box and converts an element's vector drawings into bitmap drawings.	Right-click on the Elements list and select Send to Unvectorize .
Send to Vectorize	Converts the drawings for the selected elements to the TVG vector file format.	Right-click on the Elements list and select Send to Vectorize .

Drawing Commands

The Drawing menu commands let you vectorize and unvectorize the drawings.

Command	Action	Access Methods
Send to Unvectorize	Opens the Send Drawings to Unvectorize dialog box and converts selected vector drawings into bitmap drawings.	Right-click on the Drawings list and select Send to Unvectorize .

Send to Vectorize	Vectorizes the selected drawings.	Right-click on the Drawings list and select Send to Vectorize .
-------------------	-----------------------------------	--

Admin Commands

The Admin menu commands let you import and export scenes, and manage the users and approval policy.

Command	Action	Access Methods
Users	Opens the User List dialog box where you can display all valid Toon Boom Harmony users in the network. You can add, delete, or modify users in this list.	
Change Approval Policy	Opens the Change Approval Policy dialog box where you can select a manual or automatic approval of the production status at each stage of each scene.	
Vectorize Style	Opens the Vectorization Styles dialog where you can select the vectorization style you want to apply to drawings before sending them to the vectorization queue.	
Export	Opens the Export Scenes dialog box where you can transfer copied data from the database to a different directory. You can also export scenes to Stage (offline version) by selecting Export Offline.	
Import	Opens the Import Scenes dialog box where you can transfer copied data from another directory into the database.	
Lock When Opening Scene	No Lock, Scene Lock, Version Lock, Asset Lock options	
Database Lock Manager		
Allow Unicode Names	Lets you use up to 120 ASCII characters for names of environments, jobs and scenes. This means you can use characters for languages, such as Japanese, Chinese, French, Spanish, and others, characters for names in your database setup—see Advanced Tips and Guidelines on page 1 .	

Help Commands

The Help menu commands let you access the Help files and Control Center About information when using Windows/Linux.

Command	Action	Access Methods
Help	Lets you view the Control Center integrated help system.	F1

Command	Action	Access Methods
Customer Improvement Experience Program	<p>The Customer Experience Improvement Program allows Toon Boom to collect usage information. The data does not contain any personally identifiable information and cannot be used to identify you. The data will consist of a basic hardware description, a project summary and usage information. The information is used only for software improvement purposes, as well as for sharing with third parties for the same reason.</p> <p>This program is enabled by default but is voluntary. If you prefer not to participate, you can opt out when you first launch the software, by using a global preference, or by a command line argument.</p>	
About	Windows/Linux: Displays product, version, licensing and copyright information.	

Chapter 3: Web Control Center



Web Control Center is a web version of the Control Center for freelancers to connect to a studio's Harmony database and download scenes to work on them remotely. Scenes can be uploaded when ready and merged back on the server.

The Web Control Center can also be used inside a studio instead of the Control Center to make use of the movie previews and thumbnails for each scene in the database.

This chapter is divided as follows:

- [Connecting to the Web Control Center on page 53](#)
- [Centralized Data, Checking Out and Global Locking on page 10](#)
- [Managing Harmony Users on page 11](#)
- [Managing Environments, Jobs and Scenes on page 17](#)
- [Exporting and Importing Data on page 38](#)
- [Control Center Commands on page 45](#)

Connecting to the Web Control Center

Before you can access the Web Control Center to exchange scenes as a freelancer or manage the database as an administrator, you must open a web browser and enter the Web Control Center URL. The URL must be set by the studio's IT department. Refer to the Harmony Server Installation Guide for details on how to install and set up the Web Control Center.

Note that if the Web Control Center application is not running, you will not be able to connect to it.

When installing Harmony Server, a default user is created called `usabatch`. The password is also `usabatch`. When you log in for the first time, use this username and password. Once logged in, you can create a set of users.

NOTE:

- Do not delete the `usabatch` username as it is used by Harmony Server for batch processing.
- It is **highly recommended to change the password**.

How to connect to Web Control Center

1. Open a web browser.
2. In the Address bar, type the Web Control Center URL provided by the studio you are working with.
 - If you are an administrator viewing the Web Control Center instance installed on your machine, enter `localhost:8080`. 8080 is the default port. If you modified it, enter your custom port number in place of 8080.

- ▶ If you are testing the connection from a different machine connected to the same local network, enter [name of machine]:8080 or the custom port number you previously set.

The Web Control Center page opens.



3. In the Username field, type the username assigned to you by the studio. If you are an administrator, enter the administrator username.
4. In the Password field, type the password assigned to you by the studio. You can change your password later. If you are an administrator, enter the administrator password.
5. Click **Login**.

Web Control Center Interface

The interface shows a table of scenes with the following data:

Scene	Current Version	Frames	Checkout User	Status	TD	ATD	Priority	Assigned
lin	1	41		to do	BATCH	BATCH	5	BATCH
lin 日本 鸟种你好	1	34		to assign	BATCH	BATCH	5	usabatch
wccnlin	1	0		Some	BATCH	BATCH	5	usabatch
wccn日本	1	60		Completed	BATCH	BATCH	5	usabatch
wccn二話	1	0		Completed	BATCH	BATCH	5	lin
lin	1	60			BATCH	BATCH	5	

The detailed view for the selected scene shows the following information:

- Name: lin
- Priority: 5
- Status: to do
- Number of Frames: 41
- Current Version: Untitled
- Technical Director: BATCH
- Assistant Tech. Director: BATCH
- Filesystem: /usadata
- Checkout User: /usadata
- Assigned to User: BATCH

The Web Control Center interface is divided into several areas:

Parameter	Description
Top menu	Contains all the commands available in the Web Control Center. You can also find the commands in the contextual menus available in each area by right-clicking.
Environments	Displays one of your projects, such as a feature film, a TV series or a group of TV spots.
Jobs	Displays the sequences or episodes in your project (Environment). You can only see your jobs when you select a project from the Environments list.
Scenes	Displays the scenes in an episode or sequence (Job). You can only see your scenes when you select a job from the Jobs list. You can also see who checked out the scene, as well as the number of versions and frames. Click the Add Column button to add information columns to the scene list such as Current Version, Frames, Checkout User and Priority.
Scene Information	Displays information on a selected scene, such as the name, priority, technical director and user who checked the scene out. You can also preview the scene's thumbnail and rendered clip of selected scenes. When you select a scene that has no thumbnail available, the request is sent to the Harmony database to create it. But first, batch processing must be enabled on the Web Control Center server. If not, nothing will happen. For more information, see <i>Batch Processing</i> in the Harmony Server Installation Guide to learn how to set it up.

NOTE: When navigating, click the Return to Scene list button in the top bar to return to the main page.

Centralized Data, Checking Out and Global Locking

When working with Harmony Server, all scenes and their data are stored directly on the database; no data is saved or stored on the client machine. The client machines access the database and load the scenes and drawings directly from the server. Each time the user saves a scene, the data is updated directly on the server. There are no upload or download operations done between the server and the clients. However, when working with the Web Control Center, users must download and upload scenes to the Harmony database.

Harmony has a lock system, referred to as *global lock*, for the different scenes and scene assets. Since all data on the server can be accessed directly and modified from any client machine, by default, scenes are locked and users must get the rights to modify them in order to save their work onto the server. Only one user at a time can modify a scene. Once a scene is opened on a client machine, other users can open the scene in read-only mode if they need to consult it, but they will not be able to save any modifications.

In the Web Control Center, when a scene is downloaded locally by a user, global locking does not apply as it will be modified in Harmony Stand Alone. To ensure that scenes are not simultaneously modified and causing conflicts, scenes downloaded through the Web Control Center can be checked out by a user. When scenes are checked out, they can be opened in read-only mode in Harmony Server.

Global lock has several levels:

A Harmony project can be locked at various levels. Its timing, drawings, version and palettes can be locked. Locking means that you have the rights to modify a scene or its assets. Other users cannot modify locked items. If someone tries to open a locked scene, it will be displayed as read-only.

Here are the different lock possibilities:

Lock	Description
Scene or Version Lock	Controls the Xsheet timing, layers, nodes but not the drawing, palettes, palette-lists or templates.
Drawing Lock	Only one user can edit and save a locked drawing.
Palette Lock	Only one user can edit and save a locked palette.
Palette-list Lock	Only one user can edit and save a locked palette-list.
Library Folder lock	Only one user can edit and save into that folder in the Library.

There are several different ways to obtain the rights to modify the scenes. It can be done when the user loads a scene from Harmony, inside the application once the scene is loaded, or when an environment, job or scene is created using the Control Center module.

Managing Users

In an animation studio, there are usually several people using Harmony who will probably be assigned different tasks, such as ink and paint or compositing. Normally, you should create a different user for each one. This way, the person assigned to ink and paint will only have access to the Paint module and not to other features that are not relevant to their work.

Anyone who uses Harmony must have a login name in order to run any of the modules. When using Harmony in standalone mode, there are no username or password required. The Harmony login is independent from the computer session login.

Users connecting to the database through Web Control Center should have a password as it's safer for accessing via the Internet. For Web Control Center users, it is recommended to create the users through Web Control Center so you can set the password.

On Windows, by default, only the `usabatch` and `BATCH` users are created. However, you should not use them for your staff. These should be kept for Harmony Server when performing background operations, such as batch processing—see [Creating a Default User for Batch Processing on page 16](#).

IMPORTANT: Before making the Web Control Center public, set passwords for all users so no one can delete everything.

All Harmony users must have their name on the user list to log in to any application. The system uses the login to track activities; it is not a security lockout.

Each login also has a user "type" assigned to it which allows access to only some of the Harmony modules.

As your studio network grows and evolves, you may need to delete old or obsolete user profiles from your system. After you delete a user profile, the person who used that profile will no longer be able to access Harmony. You cannot delete yourself from the user list. If you accidentally delete a name, you must follow the procedures for adding a user to get the name back into the system.

You can modify the user profiles at any time to update the user information.

NOTE: To change your own user profile, log in as `usabatch` (the default user).

If new users were created through the Control Center module while working in Web Control Center, you can refresh the list to get the most up to date information.

How to view the user list

1. Select **Admin > Manage Users**.

The Manage Users screen displays a list of users in the system.

Manage Users

Username	First Name	Last Name
BATCH		
c-lynn	Carolyn	Lynne
jsmith	John	Smith
jsmith-01	Johnny	Smith
sali	Shawn	Alan
usabatch		

2. Select a user from the list.

The user information is displayed on the right.

Manage Users

Username	First Name	Last Name
BATCH		
c-lynn	Carolyn	Lynne
jsmith	John	Smith
jsmith-01	Johnny	Smith
sali	Shawn	Alan
usabatch		

Editing c-lynn

New username:

First Name:

Last Name:

Type:

If you leave these fields empty, password will not be changed

Set Password

New Password:

Confirm New Password:

User information

3. When you are finished, click **Return to Scene List** at the top-left of the screen.

How to add a user to Harmony

1. Select **Admin > Manage Users**.
2. In the upper-right corner of the Manage Users screen, click **Add User**.

The Create New User section displays.

Create New User

New username:

First Name:

Last Name:

Type:

Set Password

New Password:

Confirm New Password:

3. In the New username field, enter the person's user name.
4. Type the person's first name and last name in the corresponding First Name and Last Name fields. If you want leave the field blank, enter a space.
5. In the Type list, select the user type to define the type of work the user typically performs. This will restrict access to certain Harmony modules and operations in the Control Center—see [User Types and Restrictions on page 59](#).

General users should be set to Animator, Xsheet, Scan or Ink & Paint so they can't delete environments, jobs or scenes.

Type :

- R & D
- Executive
- Coordinator
- Supervisor**
- TD
- Archive
- Xsheet
- Scan
- Ink & Paint**
- Animator

6. For the password, do one of the following:
 - ▶ To set a password (recommended), select the **Set Password** option and enter a secure password in the New Password field. The user has the ability to modify the password later on.
 - ▶ If you do not want the user to have a password, deselect the **Set Password** option and go to step 8.
7. In the Confirm New Password field, retype the password to confirm it.
8. Click **Create**.

The name appears in alphabetical order in the user list.

How to delete a user

1. Select **Admin > Manage Users**.
2. In the Manage Users screen, right-click on a user to delete and select **Delete User**.
The Confirm dialog box opens.
3. Click **OK**.

How to modify user information

1. Select **Admin > Manage Users**.
2. In the Manage Users screen, select the user to modify.
The Editing [username] section appears.
3. Modify the information as required.
4. Click **Apply**.

How to refresh the user list

1. Select **Admin > Manage Users**.
2. In the Manage Users screen, right-click on the user list and select **Refresh List**.

User Types and Restrictions

Here are the different user types available and their restrictions:

Feature	Control Center	Web Control Center	RND, Coordinator, Supervisor, TD, Executive	Animator	Xsheet, Archive	Scan	Ink & Paint
Create Environment	•	•	•				
Change Asset Lock on Environment	•	•	•				
Delete Environment	•	•	•				
View Vectorize Queue	•		•	•	•	•	•
View Render Queue	•		•	•	•	•	•
Create Job	•	•	•	•			
Change Job Priority	•	•	•	•	•	•	•

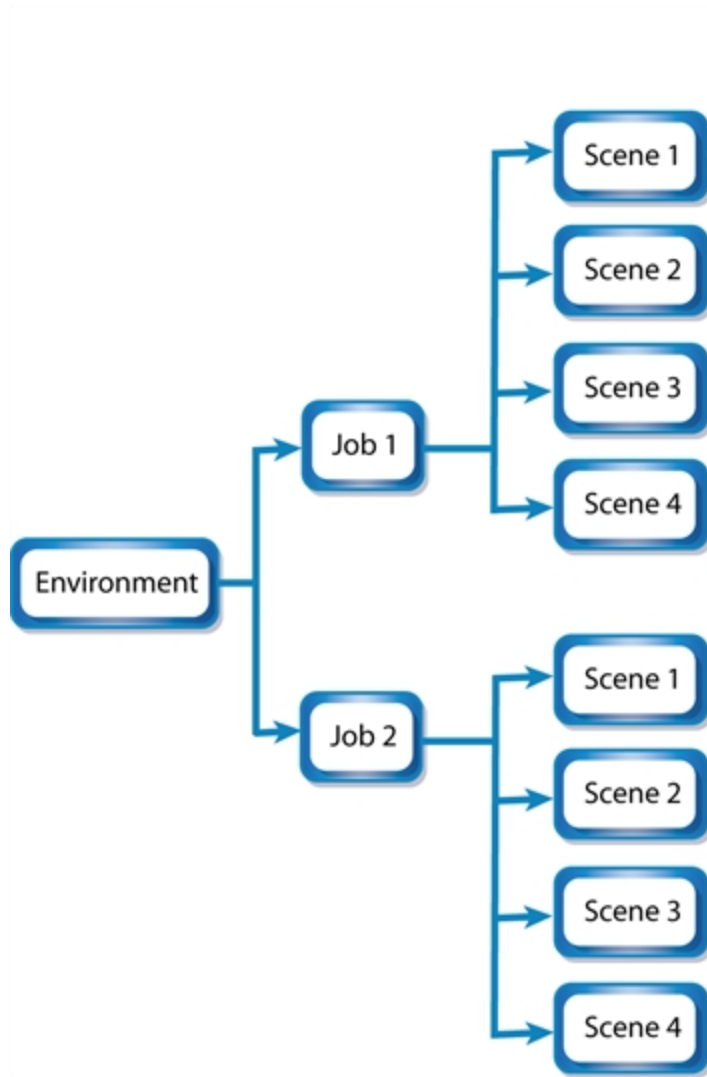
Change Job Status	•	•	•				
Delete Job	•	•	•				
Create Scene	•	•	•	•		•	•
Delete Scene	•	•	•				
Unlock scenes locked by another user	•	•	•				
Unlock scene version locked by another user	•	•	•				
Unlock scenes locked by me	•	•	•	•	•		
Unlock scene version locked by me	•	•	•	•	•		
Move Scene	•		•				
Rename Scene	•	•	•				
Clear Scene	•	•	•				
Change Scene Priority	•	•	•	•	•	•	•
Change Scene Status	•	•	•				
Reorder Scenes	•	•	•				
Copy Scenes	•	•	•	•			
Send to Vectorize	•	•	•	•	•	•	•
Send to Unvectorize	•	•	•	•	•	•	•
Send to Rendering	•	•	•	•	•	•	•
Add/Modify/Delete Users	•	•	•				
Change Approval Policy	•	•	•				
Change Vectorize Style	•		•	•	•	•	•
Change Asset Lock	•		•				
Database Lock Manager	•		•				
Export Scenes	•	•	•	•	•		
Import Scenes	•	•	•	•	•		

View Error Log	•	•	•	•	•	•	•
View Elements	•		•	•	•	•	•
View Drawings	•		•	•	•	•	•
Open in Control Center	•	•	•	•	•		
Open in Paint	•		•	•	•	•	
Open in Scan	•		•	•	•	•	•

Managing Environments, Jobs and Scenes

Every project you create with the Harmony solution starts with an environment, the highest level in the Web Control Center. After that, you can add jobs and scenes. Elements (layers and columns) and drawings can only be created directly in Harmony Advanced or Harmony Premium when working with the Web Control Center.

The Web Control Center divides your animation project into the following categories which organize the components of your animated projects:



- **Environment:** This is the name of your animation project.
Example: `adventure_movie`
- **Jobs:** These are the major sections of an environment, such as sequences or episodes.
Example: `adv_seq_001`, `adv_seq_002`

IMPORTANT: All jobs are stored in the same location in the Harmony database. Be sure to prefix all job names appropriately, so you can identify the project in which it belongs. Each job must have a **different** name. You **cannot** give two jobs the same name.

- **Scenes:** These are the different shots in a job.

Scenes are contained in their respective job folder in the Harmony database. If desired, prefix all scenes names appropriately, so you can identify the environment and job to which they belong.

Example: `adv_sc_001`, `adv_sc_002`, `adv_sc_003` and so on.

As your projects come and go, you will probably want to start cleaning up your database, as well as your server's hard drive, by removing old and obsolete environments and their associated animation data.

IMPORTANT: After you delete a scene, job, or environment, the associated data is **permanently removed** from your storage disks. Make sure you really want to erase these items before you delete them as there is no way to retrieve the data after it has been erased.

You might want to export old environments and archive them somewhere else before you delete them from your system.

NOTE: If you are working in a mixed Windows/Mac OS X/Linux environment or share files with other studios that do, you should use lowercase letters to name the various items in your animation projects and not include any spaces. For example, write `the_show` instead of `The Show`. This is useful for Linux because it is case-sensitive whereas Windows is not.

Managing Environments

Harmony uses environments to manage and organize related projects. Using environments allows you to organize your production projects by their nature or type.

If your projects center around episodic and commercial types of work, you can create two environments. For example, one environment called `commercials` and the other called `the_show`. Then you can insert the jobs that relate to each type of project. When you want to work on a commercial project, open the `commercials` environment and select the commercial job you need. Similarly, if you want to work on an episodic project, open the environment called `the_show`.

Environment	Job	
commercials	dentist	sc_001
		sc_002
	soda	sc_001
	cereal	sc_001
the_show	sho_001	sc_001
		sc_002
	sho_002	sc_001
	dentist	sc_001
		sc_002

When you are ready to remove old environments, you can delete them from the database. However, in order to prevent accidental loss of data, you can only delete an empty environment (one that contains no jobs, images, or palette information).

How to create an environment

1. From the top menu, select **Environment > Create**.

In mixed platform Environments (Windows/Mac OS X and Windows/Linux) it is best to name everything in lowercase so data can be interpreted the same way on each operating system. The same is true if working between studios using Windows, Mac OS X, and Linux.

The Create Environment dialog box appears.



2. In the Create Environment field, enter a name for the new project.

NOTE: The environment name is alphanumeric and can include underscores (_), but no spaces or other special characters. The environment name is case sensitive.

3. To grant the user with the rights to modify all the scene assets (drawing, scene setup, palette lists, etc.), select the **Change Asset Lock** option.
4. Click **Create**.

The new environment appears in alphabetical order in the Environments list.

NOTE: After you create an environment, you must add it to the Batch Processing queue so it can vectorize and render the drawings and scenes automatically. You only need to do this once. You can only do this in a shell with the `setdef` command.

How to delete an environment

1. In the environment section, select the environment to delete from the Environment list.
2. Select **Environment > Delete**.
The Confirm dialog box appears.
3. Click **OK**.

Managing Jobs

Within each environment is a list of jobs that contains all the segments for your animated sequence. If you are creating a weekly television series called **The Show**, you could name your job `show_ep_06` (`the_show` would be the name of your environment).

If each episode is composed of 100 animated shots, each job would contain 100 scenes.

Each job must have a unique name. Two jobs cannot have the same name, even if they appear in two different environments, because all the jobs are in the same folder on the server.

As you complete your animation project, you can update a job's status to reflect its progress in the overall production. You can indicate a job as being in production or not. If a job is in production, other modules can still access this job. If a job is no longer in production, it means the job is completed. The Harmony database still has all the job's components (scenes, elements, drawings), but the job neither appears nor is accessible from the Harmony applications.

In most cases, a job is no longer in production after it has been finalized (inked, painted, rendered) and transferred to a medium, such as Blu-ray, or sent to post-production. However, if you need to continue working on a job, you can revert its status at any time.

Before sending a job's scenes to be vectorized or rendered, you can set their priority level for the processing queue. Increasing the priority of a job makes the system process it before other jobs in the queue. For example, if job B is before job A in the queue, you can change the priority, so job A is processed first.

Changing a job's priority does not affect the vectorizing or rendering of jobs already sent to the queue. It will only affect jobs that are sent after the priorities were changed.

When you no longer need a job, you can delete it. Doing so will permanently remove the following:

- Scenes
- Elements
- Drawings
- Database information associated with the selected job
- Palettes stored under the selected job

Before you delete a job:

- Make sure no one else is currently using the job. Failure to do this may result in file corruption and loss of your work.
- Wait until everyone is offline. This ensures no one can open the data files while you delete them.

IMPORTANT: You cannot archive a job by deleting it. To archive a job, export first and save it to a secure location to be stored permanently.

NOTE: You cannot delete a job if it still contains scenes.

How to create a job

1. From the Environment list, select the project in which you want to create a job.
2. Select **Job > Create**.

The Create Job window opens.

- In the New Job Name field, enter the name of the job to create.

NOTE: The job name is alphanumeric and can include underscores (`_`), but no spaces or other special characters. The job name is case-sensitive.

- From the Technical Director list, select a technical director (TD). The names available are generated from a list of all possible users by their login username. You must select a TD to create the job.

A TD is usually the person who oversees the animation project and makes sure the work is done properly. Select the person who most closely resembles this definition. If you do not have a particular user for the task, you can simply assign this field to: **BATCH**.

When creating Harmony users, you can label a user as a TD.

- From the Assistant Technical Director list, select an assistant technical director (ATD). The names available are generated from a list of all possible users by their login username. You must select an ATD to create the job. If you do not have an ATD, select the same person for the TD and ATD jobs. In some studios, the responsibilities of the TD can be shared by more than one person. This second person is the ATD.
- From the Approval list, select how Harmony will mark the various stages that the scenes will pass through in your production schedule.
 - ▶ **Automatic:** When you work on scenes, Harmony automatically approves their status at each stage.
 - ▶ **Manual:** When you work on scenes, the TD or ATD must approve their status at each stage using the Change Status command in the Scene menu.
- Adjust the Priority slider to increase or decrease the job's priority (0 means the job has the highest priority for processing through the Vectorize or Render queue, and a job with a priority of 10 is the least important). Jobs with higher priorities pass in front of other projects with lower priorities in the rendering and vectorizing queues.

If you do not know what priority to assign to your project, leave it at 5. You can always change it later.

- Click **OK**.

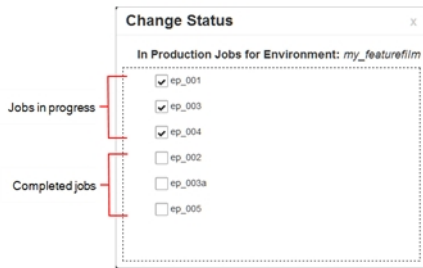
Web Control Center adds the new job to the selected environment; it appears in alphabetical order in the Jobs list.

How to change the status of a job

- From the Environment list, select an environment.

2. Select **Job > Change Status**.

The Change Status window opens.



3. Deselect any completed jobs and close the window.

The deselected jobs no longer appear in the Jobs list.

How to change a job's priority

1. From the Environment list, select the environment with the job whose priority you want to change.
2. From the Job list, select a job.
3. Select **Job > Change Priority**.

The Change Priority window opens.



4. Adjust the slider to increase or decrease the priority (0 means the job has the highest priority for processing through the Vectorize or Render queue. A job with a priority of 10 is the least important). Jobs with higher priorities will pass in front of other projects with lower priorities in the queues.
5. Click **OK**.

When you send this job to be vectorized or rendered, it will have this new priority in the processing queue.

How to delete a job

1. From the Environment list, select the environment with the job you want to delete.
2. From the Job list, select a job to delete.
3. Select **Job > Delete**.
4. Click **OK**.

Managing Scenes

After you create a scene, you can view some of the scene information in the Scenes list, such as the version, number of frames and status.

NOTE: It is useful to have at least one Display node in your scene as it dictates what is displayed in the movie and thumbnail of the selected scene.

Scene	Current Version	Frames	Checkout User	Status	TD	ATD	Priority	Assigned
lin	1	41		to do	BATCH	BATCH	5	BATCH
lin日本àçèé你好	1	34		to assign	BATCH	BATCH	5	usabatch
wcclin	1	0		done	BATCH	BATCH	5	usabatch
wccli日本	1	60		Completed	BATCH	BATCH	5	usabatch
wccli二誌よ	1	0		Completed	BATCH	BATCH	5	日本é
win	1	60			BATCH	BATCH	5	

NOTE: Add more categories to the Scenes list by clicking the plus (+) icon at the top-right corner and selecting items to view—see [Scenes List on page 91](#).

When creating scenes, you must indicate where you want to store the scene data and where you want the new scene to appear in the Scenes list. You can create a single scene or multiple scenes at the same time.

When deleting a scene, you remove the scene from the Web Control Center window, as well as permanently removing all the information associated with the scene including:

- Exposure sheet (and all associated versions)
- Elements
- Drawings
- Database information
- Any palettes stored in that scene's palette library

Before you delete a scene:

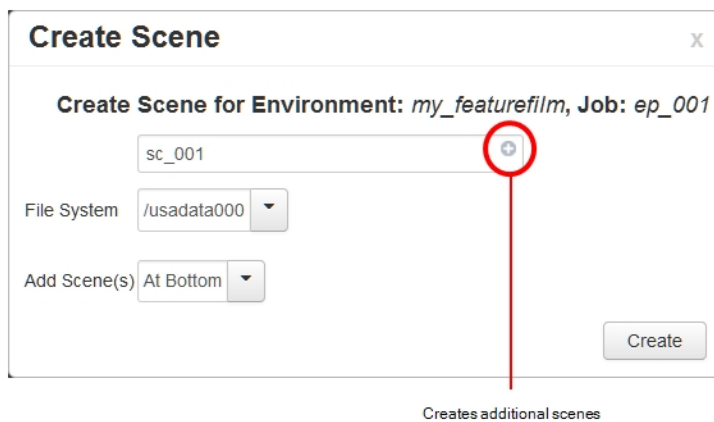
- Be sure you really want to remove all this information from the system.
- Are you going to use the scene in the future?
- Do you need to archive the scene for future use?
- Make sure no one else is currently using the scene. Failure to do this may result in file corruption and loss of work.
- Wait until everyone is offline. This ensures no one will open the scene as you are trying to delete it.

NOTE: When selecting scenes from the Scenes list, there is a delay for the first preview/thumbnail update because it is done in batch render.

How to create a scene

1. From the Environment list, select the environment with the job in which you want to add scenes.
2. From the Job list, select the job in which you want to add scenes.
3. Select **Scene > Create**.

The Create Scene window opens.



4. In the first field, enter the name of the scene to create.
5. To create additional scenes, do one of the following:
 - ▶ Click the plus (+) sign and enter a name.
 - ▶ Press Enter/Return.
 Repeat until you have the required number of scenes.

NOTE: When creating a new scene or renaming a scene, the scene's name cannot exceed 23 characters. Job and scene names are alphanumeric and can include underscores (_), but no spaces, or other special characters. All names are case-sensitive.

6. From the File System list, select the path where you want to store the files.

If you are unsure which hard drive to select, consult your technical director or system administrator.

NOTE: Although you can add as many scenes as you want, you can only select one path at a time. Therefore, the Web Control Center stores all scenes you create in one session at the same place (same path).

7. Select where you want to place the scene(s) in the Scenes list from the Add Scene(s) list:
 - **At Bottom:** Places the new scenes at the bottom of the list.
 - **At Top:** Places the new scenes at the top of the list.
8. Click **Create**.

The new scene(s) are created and displayed in the Scene list. If you do not want to create the scene(s), click the close button (x) at the top-right corner of the Create Scene window.

How to delete a scene

1. From the Scenes list, select a scene name to delete.
2. Do one of the following:
 - Select **Scene > Delete**.
 - Right-click and select **Delete**.The Confirm dialog box appears.
3. Click **OK**.
The scene name all its associated files are deleted.

Checking Scenes In and Out

It is important to check out a scene before working on it. If you have downloaded a scene to work on and forgot to perform a checkout, other users can access and modify the scene on the server which would cause conflicts with your work when you upload the scene later. In the Web Control Center, you can check out the scene even if you have started to modify it. Once you check out a scene, others can only access a read-only copy.

When you are finished working on a scene, you must upload it to the database and check the scene back in.

NOTE: Remember that even if you forget to check out a scene, you can still perform partial updates to the scene in the database when you use the **Update Database Scene** command (File menu). This could cause conflicts with other users. For more information on partially updating scenes, see [Partial Scene Updates on page 85](#).

How to check out or check in a scene

1. From the Scenes list, select the scene to check out.
2. Do one of the following:
 - Select **Scene > Checkout** or **Checkin**.
 - Right-click and select **Checkout** or **Checkin**.The Checkout or Checkin Scene confirmation window opens.
3. Click **OK**.

Renaming Scenes

As you work on scenes, their nature and content may change and the name of the scene may no longer be relevant. When this happens, you can rename the scene.

Before renaming a scene:

- Make sure no one else is currently using the scene. Failure to do this may result in file corruption and loss of your work.
- Wait until everyone is offline. This ensures no one can open the scene while you rename it.

How to rename a scene

1. From the Scenes list, select a scene to rename.
2. Do one of the following:
 - Select **Scene > Rename**.
 - Right-click and select **Rename**.

The Rename Scene window opens.



3. Enter the new scene name and click **Rename**.

NOTE:

- Use lower case letters if the scenes may be used with a Windows workstation.
- When creating a new scene or renaming a scene, the scene name cannot exceed 23 characters.

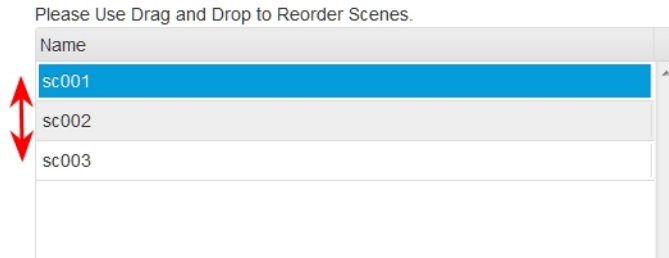
Reordering Scenes

You can change the sequence of scenes in your job, which affects the order in which the scenes appear in the job throughout the system. You can place a scene anywhere in the Scenes list or sort them alphanumerically.

How to reorder a scene

1. Select a scene from the Scenes list.
2. Select **Scene > Reorder**.

The Reorder Scenes window opens.



3. Drag a scene up or down to reorder it.
4. Click **OK**.

Clearing Scenes

If you must clear a scene from Web Control Center, wait until everyone is offline to ensure no one can open the data files while you clear them. Otherwise, there is a risk of corrupting the files and losing work.

How to clear a scene

1. From the Scenes list, select a scene to clear.
2. Do one of the following:
 - Select **Scene > Clear**.
 - Right-click and select **Clear**.
 The Confirm dialog box appears.
3. Click **OK**.

The Scene list refreshes and displays blank elements and drawings lists, showing that the Web Control Center module has deleted the exposure sheet for the scene you cleared.

Changing the Status of Scenes

Changing a scene's status and making manual approvals is a way to track its progress in your production. For example, in a scene whose drawings are being scanned, you can set the scene status to Scan. After you begin adding colour to these line drawings, you can change the scene status to Paint.

To change a scene's status, the approval policy must be set to Manual. You can also create customized approval stages that reflect the approval process in your production environment—see [Managing Jobs on page 64](#).

How to change a scene's status

1. Select a scene from the Scenes list.
2. Do one of the following:
 - Select **Scene > Change Status**.
 - Right-click and select **Change Status**.
 The Change Status window opens.



3. Select a status for the scene.
4. Click **Apply**.

Customizing the Scene Status Colour

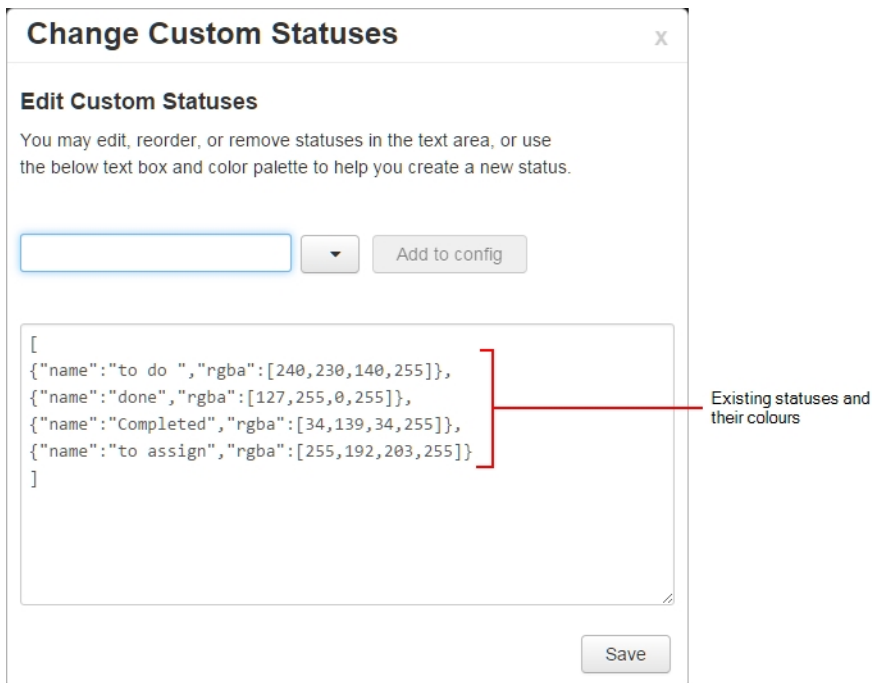
Changing a scene's status is easy when you can use colours to help differentiate them. With a glance at the Scenes list, you can quickly assess the status of a production.

You can add new scene statuses and customize their name and colour, as well as manually edit the list.

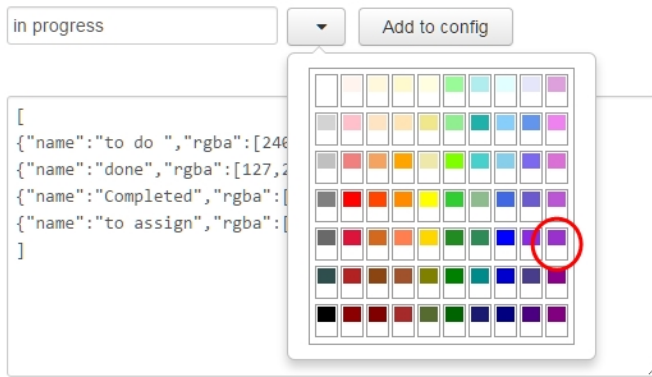
How to customize the scene status colour

1. Select **Admin > Change Statuses**.

The Change Custom Statuses window opens.



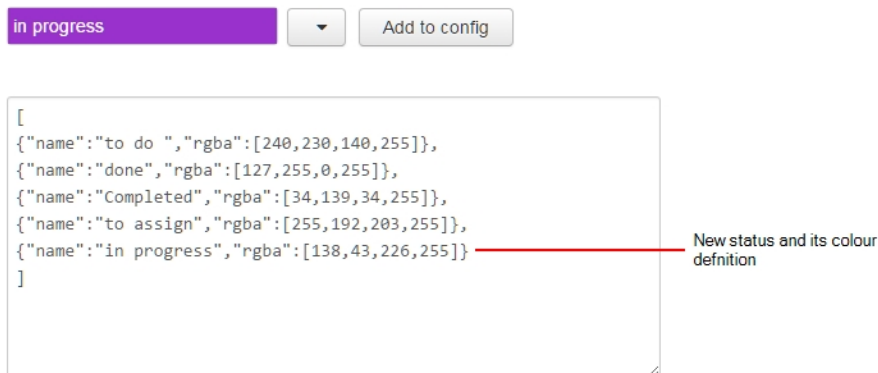
2. In the Status field, type in the name of the new status to create.
3. Click the arrow and select a colour for the new status.



4. Click **Add Config**.

The new status and its colour are displayed. The list of statuses updates with the new status and its colour definition.

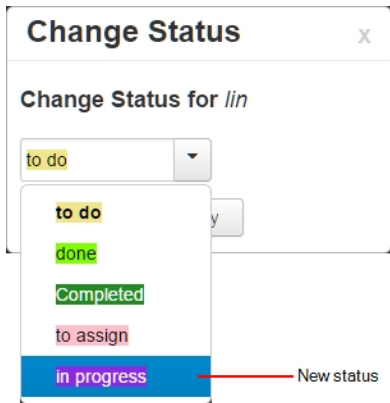
NOTE: You can manually edit the name and colour definition of scene statuses. If you do, make sure there is no comma at the end of the last line.



5. Click **Save**.

The new status is added to the list of statuses and the Change Custom Statuses window closes.

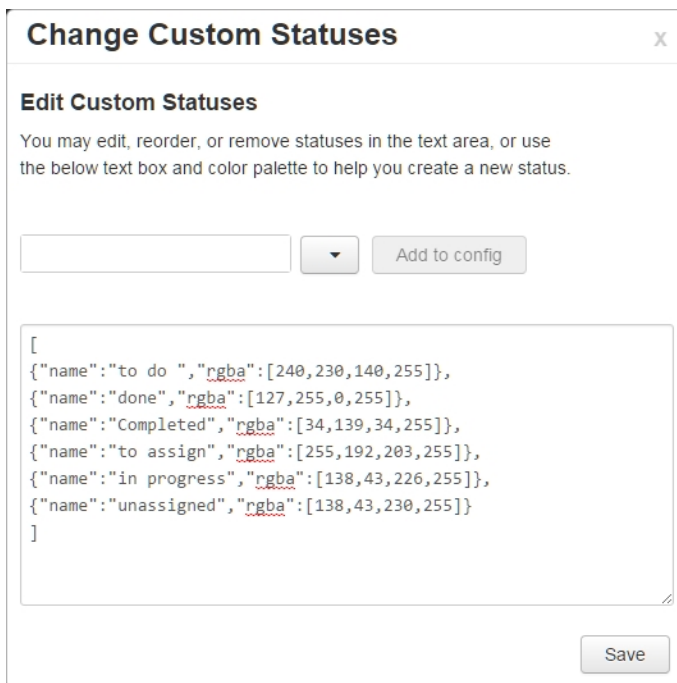
The next time you change the status of a scene, the new status will be available from the list.



6. Select a status for the scene.
7. Click **Apply**.

How to edit the Scene Status list

1. Select **Admin > Change Statuses**.



2. In the Change Custom Statuses window, manually edit the name and colour of a scene status. You can also add or delete a status.

NOTE: At the end of the last line, make sure there is no comma.

```
[
  {"name": "to do ", "rgba": [240, 230, 140, 255]},
  {"name": "done", "rgba": [127, 255, 0, 255]},
  {"name": "Completed", "rgba": [34, 139, 34, 255]},
  {"name": "to assign", "rgba": [255, 192, 203, 255]},
  {"name": "in progress", "rgba": [138, 43, 226, 255]},
  {"name": "unassigned", "rgba": [138, 43, 230, 255]}
]
```

Name of scene status
Colour definition

3. Click **Save**.

Assigning Users to a Scene

Assigning a user to a scene makes it easy to manage your production and track its progress.

How to assign a user to a scene

1. Select a scene from the Scenes list.
2. Do one of the following:
 - ▶ Select **Scene > Assign User**.
 - ▶ Right-click and select **Assign to User**.

The Assign User window opens.



3. Select a user to assign to the scene.
4. Click **Assign**.

Setting the Scene Priority

You can change a scene's rendering and vectorization queue priority to place it ahead of or behind other scenes. For example, if scene B comes before scene A in the queue, change the scene's priority so scene A is processed first.

If a scene was already sent to the queue, changing the priority will not affect its priority in the queue. Changes will only be applied the next time it is sent to the queue.

NOTE: If you want to change a scene's priority after it has been sent to the queue, you can do so using the Change Priority button in the Queue window in the Control Center module—see Viewing the Render Queue in the Harmony Server Installation Guide.

How to change the scene priority

1. Select a scene from the Scenes list.
2. Do one of the following:
 - ▶ Select **Scene > Change Priority**.
 - ▶ Right-click and select **Change Priority**.

The Change Priority window opens.



3. Drag the slider to adjust the priority. 0 = the highest priority for processing through the Vectorize or Render queue and 10 = a priority of 10 is the least important. Items with higher priorities pass in front of other projects with lower priorities in the Vectorize and Render queues even if there is already a queue processing.
4. Close the window.

The new scene priority appears in the Priority column of the Scenes list.

Searching Scenes

When managing your production, you will want to search and filter scenes to accurately track progress. In the Web Control Center, you can search scenes by user or state, or both at the same time.

How to search scenes by user or state

1. Click **Advanced search**.

Scene	Current Version	Frames	Checkout User	Status	TD	ATD	Priority	Assigned
win	1	60			BATCH	BATCH	5	
wccl 二詩よ	1	0		Completed	BATCH	BATCH	5	日本é
wcclin	1	0		done	BATCH	BATCH	5	BATCH
wccl 日本	1	60		done	BATCH	BATCH	5	usabatch
lin 日本あやめ你好	1	34		to assign	BATCH	BATCH	5	usabatch
lin	1	41		to do	BATCH	BATCH	5	BATCH

Two search fields appear.

Advanced search

Select a User ▼

Select a State ▼

2. Do one or both of the following:

- ▶ To search for a user, select one from the Select a User list.

Advanced search

Select a User ▼

BATCH

usabatch

日本é

Unassigned

The Scenes list updates to display only the scenes assigned to the user you selected.

Scene	Current Version	Frames	Checkout User	Status	TD	ATD	Priority	Assigned
wcclin	1	0		done	BATCH	BATCH	5	BATCH
lin	1	41		to do	BATCH	BATCH	5	BATCH

- ▶ To search for a state, select one from the Select a State list.

Advanced search

Select a User ▼

Select a State ▼

to do

done

Completed

to assign

Unassigned

The Scenes list updates to display only the scenes assigned to the state you selected. In this example, we searched for a user named BATCH and a state called "done". The result is one scene displayed below.

Scene	Current Version	Frames	Checkout User	Status	TD	ATD	Priority	Assigned
wcclin	1	0		done	BATCH	BATCH	5	BATCH

How to reset the Advanced Search fields

1. Do one of the following:

- ▶ Click **Advanced search** to close the search fields. Click **Advanced search** again to reopen the fields.
- ▶ Place your cursor in a search field and press Backspace repeatedly until the field is blank.

Vectorizing Scenes

When your scene is completed, you can revectorize scanned drawings with a different vectorization style, including TVG, greyscale, greyscale rougher lines or soft edge, and tones/highlights. You can also choose to convert vector drawings into bitmap drawings.

If you didn't scan drawings and just did them paperless or imported them, you cannot revectorize them because the original bitmaps are required in the scene.

How to vectorize scenes

1. Select a scene from the Scenes list.
2. Do one of the following:
 - ▶ Select **Scene > Vectorize**.
 - ▶ Right-click and select **Send to Vectorize**.

The Send to Vectorize window opens.



3. Select a vectorization style for the scene.
4. Click **Send to Vectorize**.

How to unvectorize scenes

1. Select a scene from the Scenes list.
2. Do one of the following:
 - ▶ Select **Scene > Unvectorize**.
 - ▶ Right-click and select **Send to Unvectorize**.

The Send to Unvectorize window opens.

3. From the Antialiasing Quality list, select a quality level.
4. In the Antialiasing Exponent field, set the .
5. In the Resolution section, select one of the following:
 - ▶ As Scanned to use the resolution at which the drawing was scanned.
 - ▶ Use Custom Resolution, then enter the desired X and Y resolution.
6. From the Output File Format list, select a format for the unvectorized scene.
7. In the Command Line field, you can enter a command from the utransform utility. For example, you can set the background colour: `-bgcolor 1.0 1.0 1.1`.
8. Click **Send to Unvectorize**.

Rendering Scenes

When one or more scenes are complete, you can send them to the batch processing machine for rendering. You can also use Harmony Advanced or Harmony Premium to render scenes, but since you must open each scene individually in Harmony, you can only send one scene to render at a time.

How to send a group of scenes to the Render queue

1. Select the environment, job and scenes to send to the Render queue.
2. Do one of the following:
 - ▶ Select **Scene > Send to Rendering**.
 - ▶ Right-click and select **Send to Rendering**.

The Send to Rendering window opens.

3. In the Range section, select the frames to render:
 - ▶ **All Frames:** Sends all the frames in the scene to be rendered.
 - ▶ **Selected Frames:** Sends a range of frames to be rendered. You can only do this if you selected one scene. Enter the frame range.
4. Select the **Chunk Size (Frames)** option if you want to split the frames into chunks. This lets you process frames among many stations instead of just one. Enter the number of frames in each chunk.
5. From the Version list, select the version of the scene to render.
6. From the Camera list, select the camera to render the scene's images. These are the cameras you created in Harmony.
7. If you want to create a sequence of images in fields, such as in NTSC or PAL, select **Enable Field Composite** option and any of the following:
 - ▶ **Add Pulldown:** Uses the 3:2 pulldown technique.
 - ▶ **Automatic Combine:** Combines even and odd fields on a scene's image.
 - ▶ **Second Field First:** Always starts with the second field before combining with the first field.
8. Click **Send to Rendering**.

Downloading and Uploading Scenes

Web Control Center allows you to download (export offline) scenes from a studio's Harmony database and work on them locally from a remote location. When downloading the scene, you have the option to check it out so it's locked; this prevents other users from modifying your scene while you are working on it. When you are finished working on your scene, you can upload (import) it, merging it back into the Harmony database.

When downloading a scene, the data is first placed in the user's exchange folder where it can then be downloaded on the user's remote computer. The exchange folder is located in the USA_DB directory of the Harmony database. This folder contains individual folders for each user; this is where uploaded and downloaded scenes are stored.

You can download scenes individually or in bulk.

NOTE: When working on local scenes, do not change the folder names or structures as it will cause problems when reimporting scenes.

When you no longer need the stored packages in the exchange folder, delete them to keep your storage space organized.

You can view all operations and error messages related to these processes in the Log view.

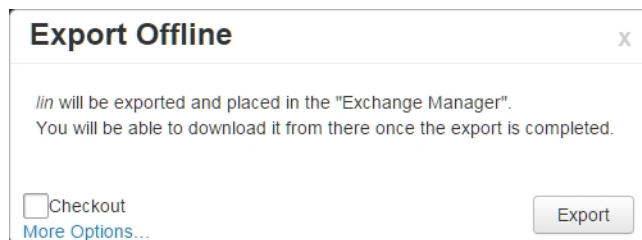
If you want to upload environments, jobs and scenes for archiving, you must use the Control Center. Web Control Center only allows you to upload and download scenes for exchange between studios and freelancers.

NOTE: Scenes cannot be uploaded or downloaded using a tablet.

How to download an individual scene

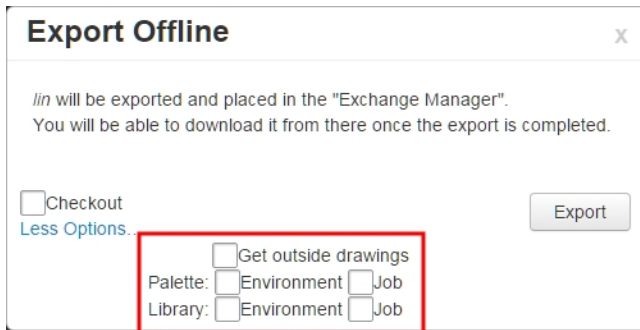
1. From the Scenes list, select a scene to export.
2. In right pane, click **Export Offline**.

The Export Offline window opens.



3. Select the **Checkout** option to lock the scene, preventing anyone from modifying the scene.
4. Click **More Options**.

Additional options for exporting offline are displayed, including the palettes and libraries for the environment and job. You can also export external drawings.

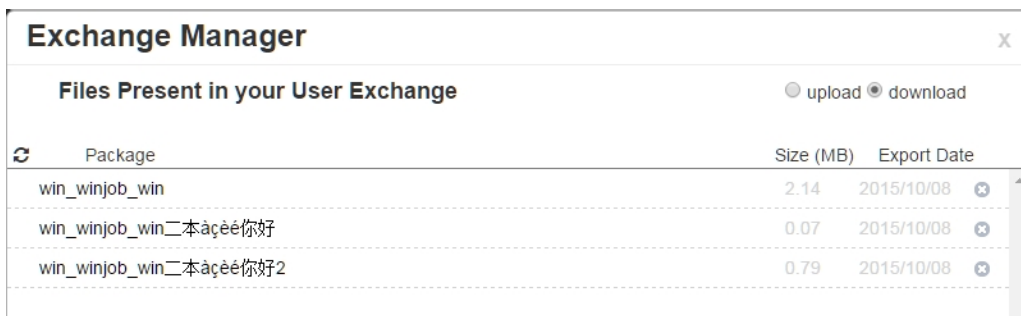


5. Select the appropriate options and click **Export**.

The selected scene is zipped and exported to your user exchange folder. Wait for the Export process to complete.

6. Close the Successful Export dialog box.
7. Select **File > Manage Uploaded/Exported Files**.

The Exchange Manager window opens.



8. To delete exported files after you download them, select the **Delete from Exchange After Download** option in the bottom-right corner.
9. In the Package list, click a web link to download.

How to download multiple scenes

1. From the Scenes list, select the scenes to export.
2. Select **Admin > Export**.

The Export screen opens. The selected scenes are listed in the List of Scenes to Export section.

- ▶ To add more scenes, select the environment, job and scenes to add and click **Add Selected Scenes**.
- ▶ To remove unwanted scenes, select the scene and click **Remove Selected Scene**.

3. To export:
 - ▶ Click **Export Offline** to export your selection to your user exchange folder using the preset options. Select the **Checkout** option to lock the scene, preventing anyone from modifying the scene. Click **Export**.

- ▶ To export your selection with custom options, click **Export to Another Database**. The Export with Options window opens—see [Import or Export to Another Database Options](#) on page 92. Select the appropriate options and click **Export**.
- 4. Close the Successful Export dialog box.
- 5. In the top-left corner, click **Return to Scene List** to return to the main page.
- 6. Select **File > Manage Uploaded/Exported Files**.
- 7. To delete exported files after you download them, select the **Delete from Exchange After Download** option in the bottom-right corner.
- 8. In the Package list, select the Zip file to download.

How to upload scenes back to the database

1. Zip (compress) your package. It should have the exact same structure and internal naming as the package you downloaded.
2. In Web Control Center, select **Admin > Import**.
The Import page opens.
3. Click **Add Another File to your Exchange** to upload your zip file.

NOTE: You can also import your zipped package through the Exchange Manager by selecting **File > Manage Uploaded/Exported Files**. In the Exchange Manager, click **Select Zip File to Upload**. Once the package is imported, go to the Import page to push it back to the Harmony database. Select **Admin > Import**. Click **Import** to import your package.

You can export offline many scenes in one package but when you reimport them, each scene must be in its own individual zip package. However, if you export/import to database, you can do multiple scenes at the import.

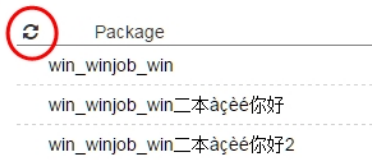
Once the package is imported, the package details disappear.

4. Select the **Checkin** option to check your scene back into the Harmony database and allow other users to modify it.
5. To import:
 - ▶ Click **Quick Import** to import your scenes using the preset options.
 - ▶ Click **Import with Options** to import your scenes with custom options—see [Import or Export to Another Database Options](#) on page 92.

NOTE: If you are trying to import a scene that was checked out by another user, you will not be able to complete the operation. A warning message will be prompted.

How to refresh the list of files in the Exchange Manager

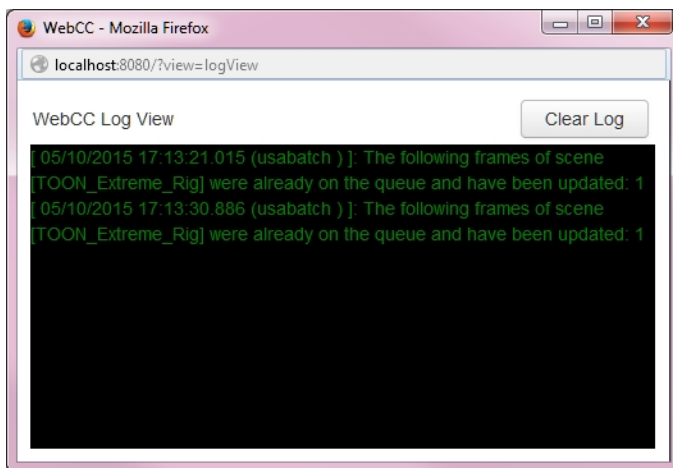
1. In the Exchange Manager, click the Refresh List button.



How to open the Log view

1. Select **Help > View Log**.

The Log view opens. Green messages indicate successful operations, orange indicates warnings, and red messages are errors or failed operations.



2. To clear all messages from the Log view, click **Clear Log**.

Partial Scene Updates

Web Control Center allows you to update a database scene with only the changes you made to the same scene on your local computer, and vice versa. If there were changes to the database scene, you can download them to its offline version on your local computer. Web Control Center works in tandem with Harmony to make the upload, download and updating of scenes seamless and quick.

When uploading or downloading a scene, Harmony prepares the export package with only the changes in the scene, zips it, sends it over the Internet, unzips it and finally imports it, updating the destination scene. This is done directly in Harmony Premium or Harmony Advanced; there is no need to do this in the Web Control Center.

How to perform a partial scene update

1. Open a web browser and connect to the Web Control Center—see [Connecting to the Web Control Center on](#)

page 53.

- From the Scenes list, select the scene on which you want to work offline.
- In the Export Offline pane on the right, click **Export Offline**.

The screenshot shows the Web Control Center interface. On the left, there is a table of scenes. The 'lin' scene is selected. On the right, the 'Export Offline' pane is open, showing details for the 'lin' scene. The 'Export Offline...' button is highlighted with a red box.

Scene	Current Version	Frames	Checkout User	Status	TD	ATD	Priority	Assigned
lin	1	41		to do	BATCH	BATCH	5	BATCH
lin日本 あごえ你好	1	34		to assign	BATCH	BATCH	5	usabatch
wcclin	1	0		done	BATCH	BATCH	5	usabatch
wccli日本	1	60		Completed	BATCH	BATCH	5	usabatch
wccli二話	1	0		Completed	BATCH	BATCH	5	日本é
win	1	60			BATCH	BATCH	5	

Export Offline...
Play the video or download it here.

The Export Offline window opens.

The screenshot shows the 'Export Offline' dialog box. It contains the following text:

lin will be exported and placed in the "Exchange Manager".
You will be able to download it from there once the export is completed.

Checkout
[More Options...](#)

Export

- Select the **Checkout** option to check out the scene.

NOTE: As a general rule, you should check out the scene from Web Control Center before working on it. Otherwise, there may be conflict issues if another user checks out the scene while you are working on it.

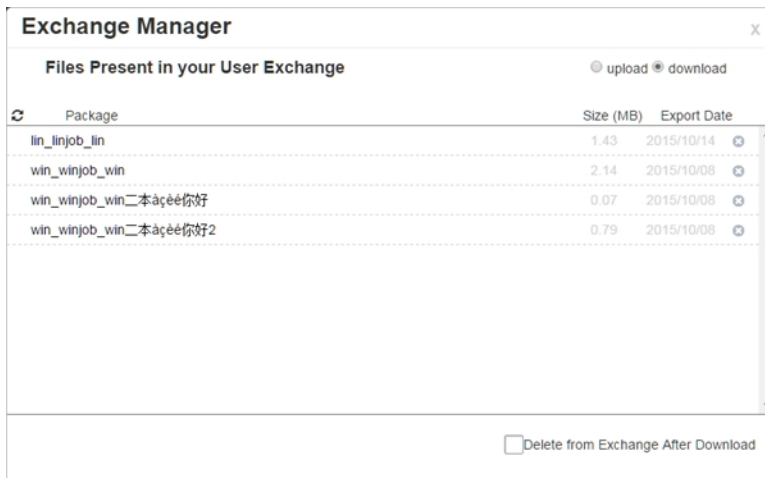
- Click **Export**.

The Export Completed confirmation window opens.

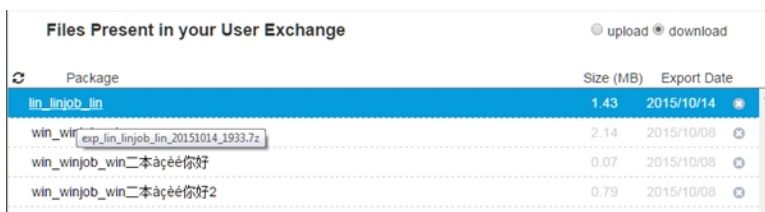


6. Close the confirmation window.
7. Select **File > Manage Uploaded/Exported Files**.

The Exchange Manager opens and displays the files in your user exchange.

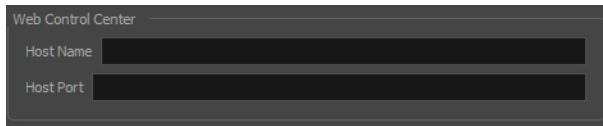


8. Select the **Download** option in the upper-right corner.
9. (Optional) Select the **Delete from Exchange After Download** option to remove the package from your user exchange after you have downloaded the scene on your computer.
10. Click the file you exported offline.



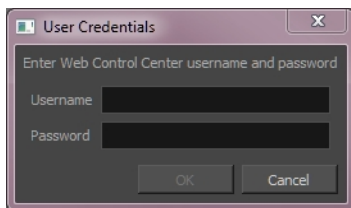
The scene downloads to your computer.

11. Close the Exchange Manager.
12. In Harmony, open the Preferences dialog box by pressing **Ctrl + U** (Windows/Linux) or **⌘ + U** (Mac OS X).
13. Select the **General** tab.
14. In the Web Control Center section, enter the host name and host port. If you are unsure, consult the studio's system administrator for this information.
 - ▶ **Host name:** Name of the Web Control Center server name.
 - ▶ **Host port:** 8080 (the default port number) or custom port number set by the system administrator.



15. Locate and open the downloaded scene and make whatever changes are needed.
16. To perform a partial scene update, select **File > Update Database Scene**.

The User Credentials dialog box opens.



17. Enter your username and password for Web Control Center and click **OK**.

Harmony prepares the export package with only the changes in the scene, zips it, sends it over the Internet, unzips it and imports it back into the database. You can perform as many partial scene updates as you like.

18. When you are finished working on the scene, check it back in Web Control Center by doing one of the following:
 - ▶ In the Scenes list, right-click on the scene and select **Checkin**.
 - ▶ Select **Scene > Checkin**.

How to update the offline scene with the latest database scene changes

1. In Harmony, open the scene to update.
2. From the top menu, select **File > Download Database Changes**.

Harmony prepares the export package with only the changes in the database scene, zips it, sends it over the Internet, unzips it and imports it to the offline scene on your computer. You can perform as many partial database scene downloads as needed.

Web Control Center Reference

File Menu

Command	Description
Manage Uploaded/Exported Files	<p>Opens the Exchange Manager, where you can upload zip files from your computer or download zip files exported from Web Control Center.</p> <p>NOTE: This command is not available on tablets.</p>

Environment Menu

Command	Description
Create	Lets you create an environment and set the rights for modifying scene assets.
Delete	Lets you delete an environment from the database. This command is only available if the environment does not contain any jobs or scenes. If it does, they must be deleted before the environment can be deleted.
Change Asset Lock	Lets you set the rights for modifying the scene assets of a selected environment.

Job Menu

Command	Description
Create	Lets you a new job to the selected environment. Your job must have a unique name in the animation database. You cannot have two jobs with the same name, even if they exist in different environments, as they are all stored in the same folder on the database.
Delete	Removes a job from the selected environment. When a job is deleted, its scenes, elements, drawings, palette library, and database information are permanently deleted. If you want to archive a job, you should delete the job only after you have exported it and saved it in a secure location. Before deleting a job, verify that it is not currently in use.
Change Approval Policy	Let you select or deselect scenes for manual approval from the TD or ATD.
Change Status	Lets you indicate whether jobs are in production or completed. You can always put a completed job back in production.
Change Priority	Lets you set the priority of the selected job for the rendering and vectorization queues. 0 = highest priority, 10 - lowest priority.

Scene Menu

Command	Description
Reset List Sorting	Resets the order of the scenes in the Scenes list. Click on the Current Version heading to order to the scenes numerically by version number. Click again to reverse the order.
Open	Launches Harmony and opens the scene in it. If it was not previously specified, you will be asked to specify the path to the software's executable file.
Create	Opens the Create Scene window where you can add one or more scenes to the selected job. You can also choose to: <ul style="list-style-type: none"> Select the file system where the created scenes will be stored.

	<ul style="list-style-type: none"> Choose the position the scene will take within the job.
Delete	<p>Removes a scene from the database. Before you use this command, make sure the selected scenes is not currently in use.</p> <p>When a scene is deleted, its exposure sheet, elements, drawings, palette library and database information are permanently removed. If you want to archive a scene, you should delete the scene only after you have exported it and saved it in a secure location.</p>
Rename	Opens the Rename Scene window where you can enter a new name for the selected scene. Before doing this, verify that the scene is not in use.
Force Unlock	<p>Unlocks a scene or version of a scene locked in Harmony.</p> <p>Usually, a scene unlocks when it is closed by a user. However, if a computer crashes while a scene is locked (in use), a scene may remain locked even if it is not open.</p>
Force Unlock Version	If you used this command on more than one scene, you are prompted for confirmation to unlock each scene separately.
Force Checkin	<p>Checks in a scene that was checked out, but not checked back in.</p> <p>Use this command only in extreme cases. Otherwise, two versions of the same scene will be in use, which will cause conflicts.</p>
Checkin	Checks in a scene that you checked out.
Checkout	Checks out a scene. If a scene is already checked out, it is available as read-only and you cannot make any changes to it.
Change Priority	<p>Lets you set the priority of the selected scene for the rendering and vectorization queues. 0 = highest priority, 10 = lowest priority.</p> <p>To change the priority of a scene already sent to the batch processing queue, use the Change Priority button in the queue through the Control Center module.</p>
Assign User	Lets you assign a user to a scene.
Change Status	Lets you change the status of a scene to indicate where it is in the animation production process.
Reorder	Lets you change the order of scenes in a job.
Clear	<p>Lets you delete a scene's exposure sheet, network, elements and database information. Image files will need to be deleted manually.</p> <p>Before using this command, make sure that none of the files in question are currently in use.</p>
Send to Vectorize	Lets you revectorize scanned drawings in the selected scene to the vector style you set.
Send to Unvectorize	Lets you convert a scene's vector drawings into bitmap drawings.
Send to Rendering	Lets you add one or more scenes to the rendering queue.

Admin Menu

Command	Description
Change Password	Lets you change your password or set an empty password (no password needed for login).
Change Statuses	Lets you edit, reorder, or remove statuses, as well as add colours to statuses.
Manage Users	Displays a list of all system users. You can add, delete or modify user information in this list.
Export	Lets you select scenes to export from the selected environment and job.
Import	Lets you upload single or multiple project zip files to your exchange folder and then import them.

Help Menu

Command	Description
Help on WCC	Opens the Web Control Center integrated help system.
Developer Help	Lets you access documentation on other APIs.
About	Opens the About Web Control Center page which displays copyright information.
View Log	Opens the WebCC log window which details the activity in the Web Control Center.

Scenes List

Parameter	Description
Current Version	Displays the version number of the scene. For example, there can be many versions of the same scene saved in the root project folder.
Frames	Displays the number of frames in the scene. This indicates the length of the scene. If artwork has not been created in the scene yet, the number of frames in the Frames column displays 0.
Checkout User	Indicates the name of the individual who checked out the scene by their login username.
Status	Indicates the status of the scene in the animation production process. The default status is left blank to indicate that the scene has not been assigned a status. The assignable statuses are: Scan, Vectorize, Pencil Test, Paint, Sceneplanning, Camera and Completed.
TD	Displays the name of the technical director of the scene by their login username.
ATD	Displays the name of the assistant technical director of the scene by their login username.
Priority	Displays the priority of the scene on a scale of 0-10 (0 = highest priority, 10 = lowest priority).
Assigned	Displays the to which a scene is assigned.

Import or Export to Another Database Options

Exporting to another database makes a package with many scenes that must be imported into another database. You cannot open them offline as individual scenes. This is useful when exchanging large quantities of scenes from one studio to another. However, a freelancer working on a limited number of scenes may not want to create a personal database at home.

Parameter	Description
Audio	Exports the Audio directory.
Database	<p>Selected by default, this option exports the elements in the scene.</p> <p>If you select this option and deselect the Elements option, you can access the elements from the Element Manager in the Control Center, but their drawing and bitmap files will not be included. The list of available versions in the scene is also exported. It is not possible to open a scene if this is not selected for export.</p>
Final Frames	Exports the directory that contains the final, rendered frames.
Element	Selected by default, this option exports the contents (drawing and bitmap files) of the Element directories.
Timing Drawings	Selected by default, this option exports the contents of the Timing directories.
Other Directories	Exports all other directories and files in the scene's data structure.
Annotation	Lets you export the different drawings created while drawing in the Annotation columns and imported images.
Harmony	<p>Selected by default, this option exports the Control Center directory, which contains the Control Center files for each scene you export. These files are necessary if you want to reuse the exposure sheet (timing) and the node structure from the original scene.</p> <p>If this option is selected, you can select the Get Outside Drawings option to copy drawings into the scene folder that is referred to by the Timing columns and their Element (Drawing) nodes.</p>
Palette	Exports the palette-library directories. Decide if you want to export the palette-library from the environment, job or scene level. When you select a level, the palette-library in lower-level directories will also be exported.

	This also exports the palette-list file which is necessary for the scene to know which palettes to use. In most cases, you should select this option as well as the Scene option.
Macros	Exports the macros (customized effect and node connections) that were created and stored in the environment, jobs or scenes to be exported. This is necessary if you have legacy scenes with macros.
Library	Exports templates created at the selected levels.

