

UHarvest™ Slingshot Reports

Introduction

UHarvest™ grain cart data can be saved to a Raven Slingshot® account. Use Slingshot to review field reports, edit data, merge multiple job files into one report, and create PDF documents. This user guide will only refer to portions of the website that pertain to UHarvest reports. For additional information about operating the Slingshot website, please refer to the “How to Use the Slingshot Website” document found on the RavenHelp.com Knowledgebase.

Settings

Once you have logged into your account, you can adjust some settings by selecting **Preferences** in the top right corner of the screen. The selected units will apply to the UHarvest reports.



Your Name | **Preferences** | Logout

My Preferences ✕

Select Language Preference *

English

Select Unit of Measurement Preference *

STANDARD

Select Map Refresh Interval Preference *

2 minutes

Idle Session Timeout Preference *

Length of time in minutes your session can remain idle before you will be logged out.

120 minutes

[CLICK HERE TO CHANGE YOUR PASSWORD](#)

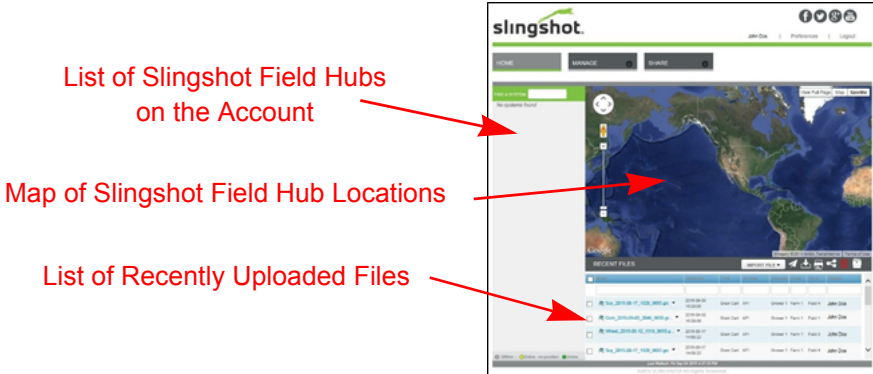
Navigation

The Slingshot Online portal has three primary navigation categories: Home, Manage, and Share. These three categories are available in tabs at the top of almost every screen.



Home Tab

Selecting the Home tab will take you directly to the Home screen. The Home screen contains the following information:



The Home screen only shows the 10 most recently uploaded files. Select a file name to view the report. Additional files can be accessed with the File Manager screen described later in this manual.

Manage Tab

Several options are listed under the Manage tab, to include:

Files

This link takes you to the File Manager. All UHarvest jobs and reports are saved in this location.

Download Manager

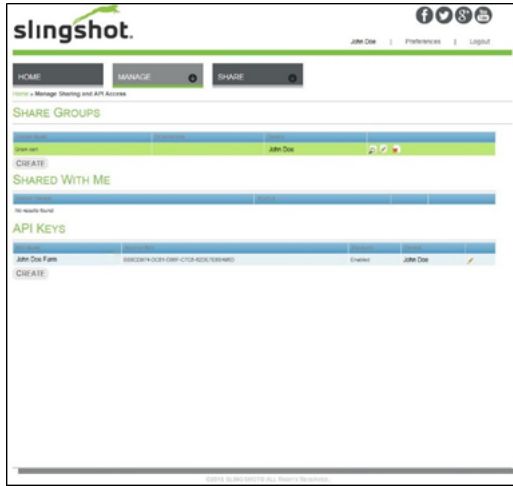
This screen is used to simultaneously download multiple files from Slingshot to your personal computer. See the [Download Manager](#) section on page 14 for more information.

Remote Support

Operators with a Raven field computer and a Slingshot Field Hub can allow remote access to Raven's technical support representatives. This **does not** include UHarvest.

Share Tab

“API and Data Access Control” is an option available under the Share tab. This screen lets you set up and monitor third party access to your Slingshot account.



Share Groups

You can create user groups, add users, and set their permission levels. This also shows a list of files that have been shared with the group. See the [Sharing Reports](#) section on page 15 for more details.

Shared with Me

This shows other user groups that you belong to. Shared files can be found in the File Manager.

API Keys

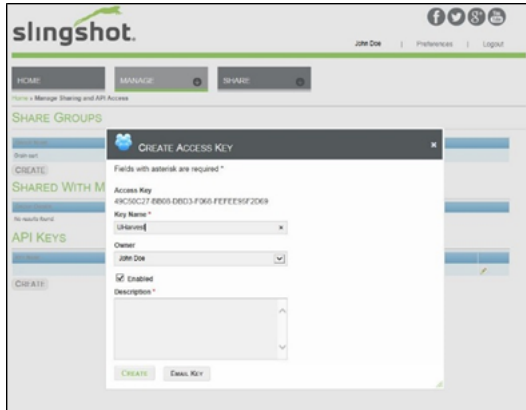
The API key is a passcode unique to your account. This passcode lets a third party device (e.g. UHarvest processor) send files to your account over the Internet. See the [Uploading Jobs](#) section on page 4 for more details.

Uploading Jobs

UHarvest jobs can be uploaded to Slingshot from your personal computer or wirelessly from the tractor cab.

Uploading Wirelessly

In order to send job files from the UHarvest processor to Slingshot, the processor requires an internet connection and the unique access key for your Slingshot account.



1. In your Slingshot account, select **API and Data Access Control** from the Share tab.
2. In the API Keys section, select the **Create** button.
3. Fill in the required information and check the **Enabled** box.
4. Select the **Create** button to finish.

Note: *You can email the access key to yourself.*

5. In the tractor, verify that the processor is connected to an internet source such as:
 - a. Slingshot Field Hub (connected to Ethernet Port A on the processor).
 - b. UHarvest/Slingshot Mobile app (see the UHarvest operation manual for details).

6. Using a tablet or smart phone, open UHarvest and select the Slingshot icon. Enter your access key.

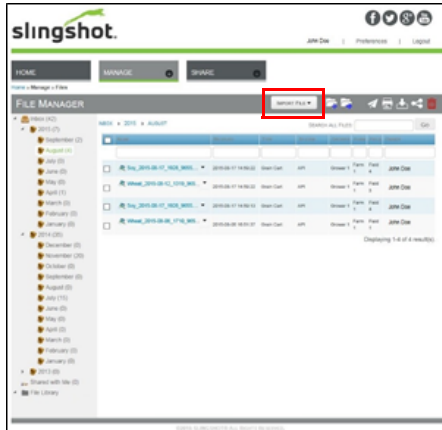
Note: *The access key will only need to be entered once. Enter the code exactly as it was shown in your Slingshot account.*

7. Go to the UHarvest file management screen. On the right side of the screen, select **Slingshot** as the destination.
8. Select the jobs you wish to upload to Slingshot. Export All will send every file. Export Selected will only send the files that are checked.
9. A message will confirm the file transfer.

Note: *Uploads may fail due to an incorrect access key or a lost internet signal. Slingshot will not accept job files with zero loads, causing their transfer to fail.*

Uploading from a Personal Computer

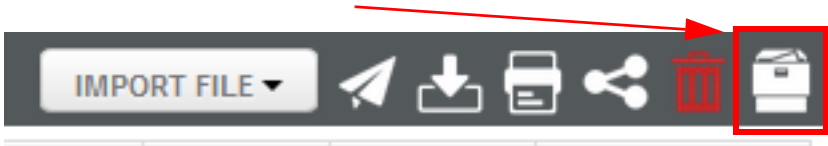
1. Transfer UHarvest job files from the processor to a USB flash drive (see UHarvest operation manual for details).
2. Insert the flash drive into your personal computer.
3. The jobs will be found in Grower/Farm/Field folder directories. On the main level of the flash drive, highlight all of the Grower folders.
4. Right click on the selected folders and select **Send To → Compressed (Zipped) Folder**.
5. Go to the File Manager screen in your Slingshot account.
6. Select the **Import File** button along the top task bar. Choose **My Library** from the dropdown.



7. Use the browser to find the zipped folder of UHarvest jobs.
8. Select the zipped folder that was just created and then select **Open**.
9. A popup message will confirm the transfer.

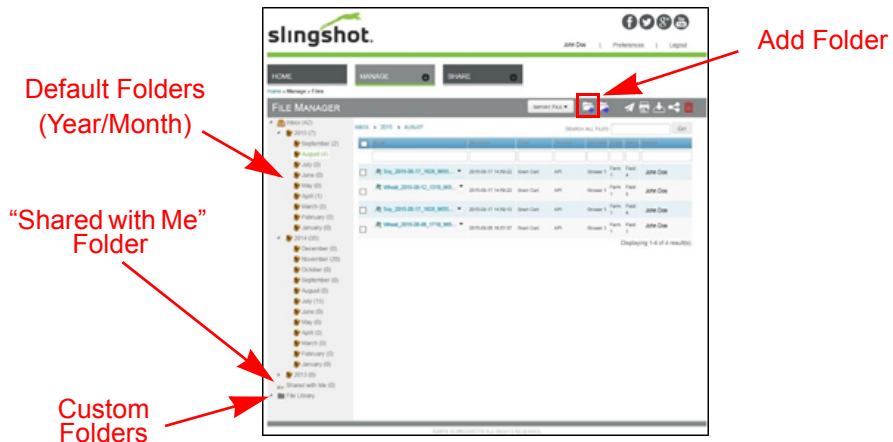
File Manager Screen

Any UHarvest jobs that have been uploaded to Slingshot will be found in the File Manager. The File Manager can be accessed by selecting Files from the Manage tab or by selecting the **File Manager** icon from the Home screen.



Inbox

Slingshot saves job files to the Inbox found on the left side of the File Manager screen. By default, files are saved to folders based on the month and year the file was uploaded to your account. If another Slingshot user has shared files with you, those files can be found in the “Shared with Me” folder. You can also create custom folders which will be found under the File Library folder.



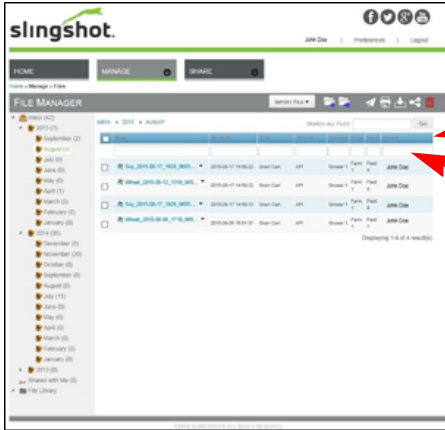
To create custom folders:

1. In the list of folders along the left side of the screen, select **File Library**.
2. Select the **Add Folder** button from the top task bar.
3. Name the folder and select the **Add** button. Repeat as needed.
4. To create a sub-folder, select the dropdown arrow behind the name of the parent file you want to use and select **Add Sub-Folder**.
5. Name the new folder and select the **Add** button. Repeat as needed.

If you need to rearrange folders, select the dropdown arrow behind the name of the file you want to move and select **Move To**. Select the name of the folder you wish to use.

Table Information

At the center of the File Manager screen, a table shows the list of files that are saved in the active Inbox folder.



Header Bar

Keyword Search Boxes

Header Configuration

Right click on the table's header to select the columns you wish to show in the table. For UHarvest users, the Grower/Farm/Field columns are suggested.

Searching

To search for a specific file in the table, you can enter keywords in the blank space beneath the header. Enter the keyword into the relevant column and then select outside of the search box to apply the filter. Keywords can be entered for multiple columns.

Moving or Deleting Files

Files can be moved from a folder. Use the checkboxes at the left side of the table to select the files you want to move. Select the **Move Selected** icon from the task bar and choose the destination folder. If you want to delete the selected file, use the **Delete Selected** icon.



Move Selected

Delete Selected

Important: Slingshot handles every upload like a unique file. If the exact same UHarvest file is uploaded twice, Slingshot will treat them like two separate files instead of overwriting the first file. To remove duplicate files from your Inbox, use the search functions to find all instances of the file. Verify which version you want to keep and then delete the unwanted duplicates.

UHarvest Job Reports

Slingshot automatically creates reports for any UHarvest jobs uploaded to the account. Selecting the job name from the File Manager will open the report in a new window. This is referred to as the Web View report. From the Web View, you can view job data, edit load information, download different formats of the report, and begin the process of merging multiple reports together.

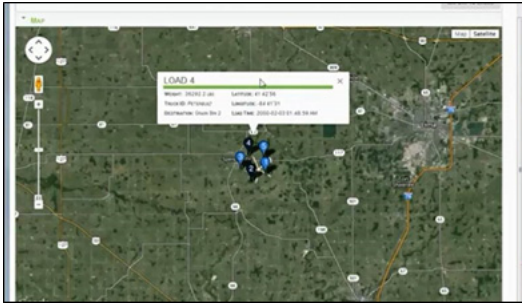
Web View

Depending on the information contained within a job, the web view has 3 to 5 sections: File Details, Job Report Summary, Details, Comment (optional), and Map (optional).



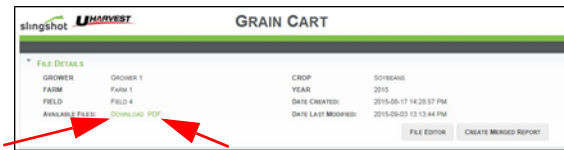
- The File Details section at the top of the screen shows the Grower, Farm, Field, Crop, and other information for this job.
- The Job Report Summary section shows an overview of the job results.
 - Job totals: total weight (lbs or kg), total wet yield (bu or kg), total dry yield (bu or kg), and average moisture percentage.
 - Pie charts show the percentage of dry grain (bu or kg) that was assigned to individual trucks, varieties, and destinations.
- The Details section shows the individual loads within the job. The loads are sorted chronologically. The Load Cell column shows the grain cart scale calibration number.
- The Comment section shows a table of notes that have been added to loads. Notes can be added in the field using a tablet connected to the UHarvest processor, or they can be added in Slingshot using the File Editor option. See the [File Editor](#) section on page 10 for more details.
- The Map section only appears if the job file contains GPS coordinates. If GPS coordinates are logged for a load, the map will show a balloon for that load number.
 - If multiple loads occurred in the same area, click on the balloon to show additional load balloons.

- Select individual balloons to see load details.



Download and PDF

The Web View allows the user to open the UHarvest report in multiple formats. Near the top left corner of the screen, there will be links for Download and PDF.



PDF Link:

- Select the **PDF** link to download a PDF version of the UHarvest report. You will be prompted to open or save the file.
- The content of the PDF report is very similar to the Web View report.
 - File Details show the Grower, Farm, Field, Crop, and Year of the job.
 - Job Report Summary shows field totals and pie charts of Truck, Destination, and Variety grain distribution.
 - If any loads contain notes, these comments will be shown after the pie charts.
 - The rest of the PDF will show a table of the loads in the job.

Note: Maps are not included in the PDF report.

Download Link:

- After selecting the **Download** link, you will be prompted to open or save a zipped folder of various reports.
- The .GRC file is the original job file as it was uploaded to Slingshot.
- The Comma Separated Value (.CSV) file is a copy of the original job report, and it can be opened directly in Microsoft Excel®.
- The .CSV file with the word “edited” in the title contains any changes that the user made using the Slingshot File Editor feature (described later in the manual).

Name	Type
Soy_2015-08-17_1928_9655	GRC File
Soy_2015-08-17_1928_9655.grc	Microsoft Excel Comma Separated Values File
Soy_2015-08-17_1928_9655_edited.grc	Microsoft Excel Comma Separated Values File

Original UHarvest File

Excel Copy of Original

Excel File Showing Edited Loads

File Editor

Users can manipulate job information in Slingshot using the File Editor. To access the File Editor, open the Web View for a job and then select the File Editor button near the top right corner of the screen. The File Editor will allow the user to edit job details and add/edit/delete individual loads.

To edit load information:

1. Select the **File Editor** button from the top right corner of the Web View report screen.
2. For the load you wish to edit, select the pencil button next to the load.
3. In the editor popup window, edit the information you want to change.
4. Select the **Save** button at the bottom of the popup window.
5. Select the **Save & View File** button to apply the changes to the report, or select **Cancel** to disregard any changes.

The screenshot displays the 'GRAIN CART EDITOR' interface. At the top, there's a header with the 'slingshot' logo and 'GRAIN CART EDITOR' title. Below the header, there are input fields for 'Full Load' (e.g., '0xy_2015-08-17_1029_9655.gr'), 'SAVE & VIEW FILE', and 'CANCEL'. The main area is divided into 'DETAILS' and a table of grain cart loads. The 'DETAILS' section includes fields for 'GRAINAGE', 'FARM', 'FIELD', 'CROP', and 'YEAR'. A 'Details' popup window is open, showing a table of grain cart loads with columns for 'Track ID', 'Plot', 'Destination', 'Variety', 'Moisture', and 'Test Weight'. The popup also has a 'Comment' field and a 'SAVE' button.

To delete a load:

1. Select the **File Editor** button from the top right corner of the Web View report screen.
2. Select the red X (✖) next to the load you wish to delete. You can also use the check boxes to select multiple loads, and then select the **Delete Selected** button.
3. Confirm your intention to delete the load(s).
4. Select **Save & View File** to apply the changes to the report, or select **Cancel** to discard any changes.

To create a new load:

1. Select the **File Editor** button from the top right corner of the Web View Report screen.
2. Select the **Add Custom Load** button.
3. In the popup window, enter the information for the new load.

Note: The window will automatically populate with the exact same information from the last load in the report, but any of those values can be changed for the custom load.

4. Select the **Save** button at the bottom of the popup window.
5. Select **Save & View File** to apply the changes to the report, or select **Cancel** to discard any changes.
6. The new load will use the date and time from when it was created and will be added to the end of the report.

Note: All user entered loads will be highlighted in red in the Web View and the PDF file.

DETAILS										
LOAD	WEIGHT	TRUCK	DESTINATION	MOISTURE	TEST WEIGHT	WET	DRY	VARIETY	DATE	LOAD CELL
1	19,583.42 LBS	T3	D3	13.5%	56.00 LBS/BU	349.7 BU	349.7 BU	V3	2015-04-01 09:21:04 AM	27932
2	19,639.25 LBS	T3	D3	13.7%	56.00 LBS/BU	350.7 BU	350.7 BU	V3	2015-04-01 09:25:54 AM	27932
3	19,708.44 LBS	TRUCK4	D1	13.6%	56.00 LBS/BU	351.9 BU	351.9 BU	V1	2015-04-01 09:30:08 AM	27932
4	19,713.31 LBS	T3	D1	13.6%	56.00 LBS/BU	352.0 BU	352.0 BU	V1	2015-04-01 09:34:58 AM	27932
5	19,757.61 LBS	T3	D1	13.7%	56.00 LBS/BU	352.8 BU	352.8 BU	V1	2015-04-01 09:38:13 AM	27932
6	19,732.83 LBS	T2	D1	13.7%	56.00 LBS/BU	352.4 BU	352.4 BU	V1	2015-04-01 09:42:48 AM	27932
7	19,826.18 LBS	T3	D1	13.8%	56.00 LBS/BU	354.0 BU	354.0 BU	V1	2015-04-01 09:46:40 AM	27932
8	19,781.62 LBS	T3	D1	13.8%	56.00 LBS/BU	353.2 BU	353.2 BU	V1	2015-04-01 09:50:29 AM	27932
9	19,731.83 LBS	T3	D1	13.8%	56.00 LBS/BU	352.4 BU	352.4 BU	V1	2015-04-01 09:54:18 AM	27932
10	19,808.60 LBS	T2	D2	13.8%	56.00 LBS/BU	353.7 BU	353.7 BU	V2	2015-04-01 10:07:02 AM	27932
11	19,637.80 LBS	T2	D2	13.9%	56.00 LBS/BU	350.7 BU	350.7 BU	V2	2015-04-01 10:10:19 AM	27932
12	19,781.22 LBS	T2	D2	13.9%	56.00 LBS/BU	353.2 BU	353.2 BU	V2	2015-04-01 10:13:21 AM	27932
13	19,787.99 LBS	T2	D2	13.9%	56.00 LBS/BU	353.4 BU	353.4 BU	V2	2015-04-01 10:16:16 AM	27932
14	19,826.68 LBS	T2	D2	13.9%	59.00 LBS/BU	336.0 BU	336.0 BU	V2	2015-04-01 10:19:15 AM	27932
15	3,030.72 LBS	T2	D3	14.2%	59.00 LBS/BU	51.4 BU	51.4 BU	V3	2015-04-01 11:49:19 AM	27932
16	48,500.00 LBS	T2	D3	18%	56.00 LBS/BU	886.1 BU	840.4 BU	V3	2015-09-30 16:19:02 PM	27932

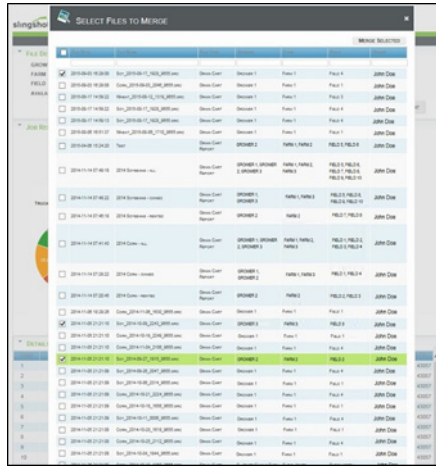
Merged Reports

UHarvest jobs can be grouped together to make merged reports. If two or more grain carts were used to harvest a field, all of these UHarvest jobs can be merged into a consolidated report for the field. Multiple fields could be merged together into a full harvest summary. You can merge any combination of individual jobs and previously merged reports.

To create a merged report:

1. Open the Web View for one of the individual jobs that will be included in the final merged report.
2. Near the top right corner of the screen, select the **Create Merged Report** button.
3. A popup window will appear with a list of all UHarvest reports (including previously merged reports). Use the check boxes to select the files you wish to merge.

Note: The blank spaces under the table's header can be used to search for specific jobs.



4. Select the **Merge Selected** button at the top right corner of the screen.
5. The next screen is used to select the loads to include in the merged report. At the top of the screen, enter a File Name for the merged report.

U HARVEST
slingshot **GRAIN CART EDITOR**

FILE NAME:

SAVE & VIEW FILE CANCEL

GROWER:
 FARM:
 FIELD:
 CROP:
 YEAR:

DETAILS DELETE SELECTED ADD CUSTOM LOAD MERGE ALL LOADS

<input type="checkbox"/>	#	PROCESSOR ID	WEIGHT	TRUCK	DEST	MOISTURE	TEST WEIGHT	WET	DRY	VARIETY	DATE	LOAD CELL
<input type="checkbox"/>	1	00.EF	19,553.25 LBS	T3	D3	13.5%	50.00 LBS/BU	349.7 BU	349.7 BU	V3	2015-04-01 09:21:04 AM	27932
<input type="checkbox"/>	2	00.EF	19,538.25 LBS	T3	D3	13.7%	50.00 LBS/BU	350.7 BU	350.7 BU	V3	2015-04-01 09:25:54 AM	27932
<input type="checkbox"/>	3	00.EF	19,708.44 LBS	TRUCK4	D1	13.0%	50.00 LBS/BU	351.9 BU	351.9 BU	V1	2015-04-01 09:30:08 AM	27932

INPUT FILES

GROWER: G2 CROP: CORN
 FARM: G2 F1 YEAR: 2015
 FIELD: G2 F1 F1

DETAILS ADD SELECTED

<input type="checkbox"/>	#	PROCESSOR ID	WEIGHT	TRUCK	DEST	MOISTURE	TEST WEIGHT	WET	DRY	VARIETY	DATE	LOAD CELL
<input type="checkbox"/>	1	00.EF	19,553.25 LBS	T3	D3	13.5%	50.00 LBS/BU	349.7 BU	349.7 BU	V3	2015-04-01 09:21:04 AM	27932
<input type="checkbox"/>	2	00.EF	19,538.25 LBS	T3	D3	13.7%	50.00 LBS/BU	350.7 BU	350.7 BU	V3	2015-04-01 09:25:54 AM	27932
<input type="checkbox"/>	3	00.EF	19,708.44 LBS	TRUCK4	D1	13.0%	50.00 LBS/BU	351.9 BU	351.9 BU	V1	2015-04-01 09:30:08 AM	27932

6. Select the **Merge All Loads** button to copy every load from every input file. The loads will be copied to the Details section of the screen. To pick and choose individual loads, refer to steps 7 through 9.
7. The Input Files section of the screen has a tab for every file that was selected for merger. For each tab, use the check boxes to select the loads you wish to include in the report.
8. Select the **Add Selected** button to copy the loads into the new report. After the loads have been added, they will be listed in the Details section of the screen.
9. Repeat the load selection process for each input file.
10. Review the list of loads in the Details section. Individual loads can be added, edited, or deleted.

Note: *If a load is created or edited, the change will only appear in the merged file and will not be reflected in the original source file. It is recommended that all load additions or revisions be made at the individual report level prior to merging.*

11. Verify the Grower, Farm, Field, Crop, and Year information at the top of the screen. By default, these items will be populated to reflect the characteristics of the input files. However, the user can enter custom values instead.
12. Select the **Save & View File** button to finish the new report.

The merged report will be automatically saved into the File Manager based on the month and year the report was created. A Web View of the report can be opened from the File Manager.

- A merged report will use tables to show grain distribution by Truck, Variety, Destination, Field name, and Grain Cart ID. The Grain Cart ID is the 4-character code from the UHarvest processor.
- Individual loads are listed chronologically.
- A PDF version of the report can be downloaded by selecting the PDF link near the top left corner of the screen.
- After a merged report has been created, loads cannot be added, edited, or deleted from the report.

Download Manager

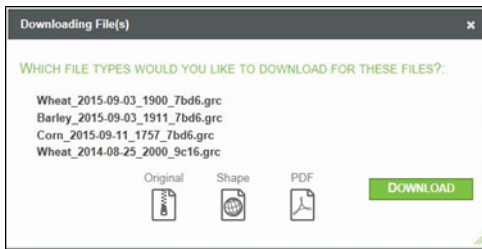
The Download Manager can be used to download UHarvest files from Slingshot to your PC. Multiple files can be downloaded simultaneously. Once files have been sent to the Download Manager, they will stay there until the user downloads them or removes them from the queue. This screen can be found under the Manage tab.

To download UHarvest files using the Download Manager:

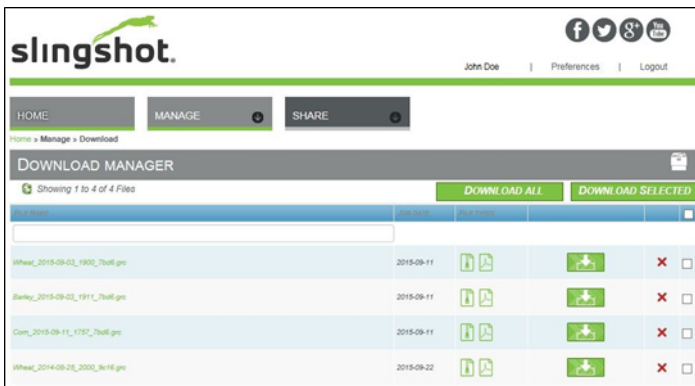
1. Go to the File Manager.
2. Use the check boxes to select the reports you want to download.
3. In the task bar, select the **Download Selected** button.



4. Choose the file format you wish to download and click on the corresponding symbol. "Original" is the UHarvest .GRC file. "Shape" is not valid for UHarvest.



5. Select the **Download** button.
6. Select **Go** to proceed to the Download Manager screen or select **Add More Files** to go back to the File Manager.
7. In the Download Manager, review the list of files in the queue. Use the red X (✖) to delete files from the list.
8. Select **Download All**.



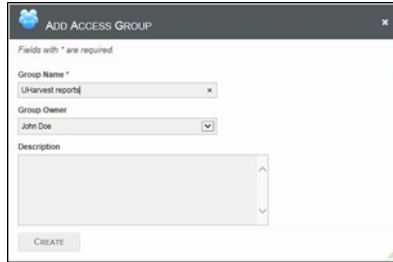
9. You will be prompted to open or save a zipped folder containing all of the downloaded files.

Sharing Reports

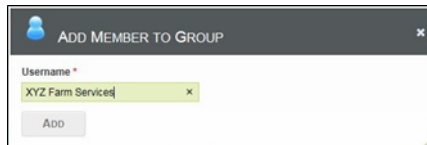
UHarvest reports can be shared with other Slingshot users. This process must be initiated by the account owner.

To share your UHarvest reports with another Slingshot user:

1. Go the API and Data Access Control section under the Share tab.
2. In the Share Groups section, select the **Create** button.
3. Enter a name for the group that will be created, and select the group owner.



4. Select the **Create** button to save the new group.
5. In the Share Groups section, select the magnifying glass icon (🔍) behind the group name.
6. Select the **Add** button.
7. Enter the Slingshot user name for the person you want to view your data, and then select the **Add** button.



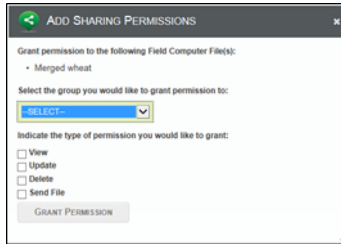
8. The other person will receive an email invitation to join your Share Group. You cannot share reports until this person has accepted the invitation.

Note: *If you belong to Share Groups that were not created by you, the list of these groups will be shown in the Shared With Me section.*

9. Go to the File Manager and use the check boxes to select the files you wish to share.
10. From the task bar, select the **Share Selected** icon.



11. In the popup window, select a Share Group.



12. Use the check boxes to set permission levels for the group.

- **View:** The recipient can only view the shared report.
- **Update:** The recipient can edit the shared report.
- **Delete:** The recipient can delete the file from his File Manager.
- **Send File:** The recipient can send the file to additional users outside of your own Share Group.

13. Select the **Grant Permission** button.

After a file has been shared with a group, you can edit permissions or remove the shared file from the group.

1. Go to the API and Data Access Control screen under the Share tab.
2. In the Share Groups section, select the magnifying glass (🔍) behind the group name.
3. A popup window will show a list of group members and a list of files shared with the group.
4. Select the red X (✖) button to remove a member from the group or to remove a file from the group's access.
5. To change the permission level for a file, select the pencil icon (✎) behind the file name.