Amazon Mechanical Turk

Requester User Interface Guide

Amazon Mechanical Turk: Requester User Interface Guide

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Designing, Publishing, and Managing HITs

Topics

The Amazon Mechanical Turk Requester user interface (RUI) enables you to design, publish, and manage thousands of HITs easily. A Requester is a person asking people to do work using Amazon Mechanical Turk. This guide is written for Requesters who want to use the RUI to create a large number of HITs easily.

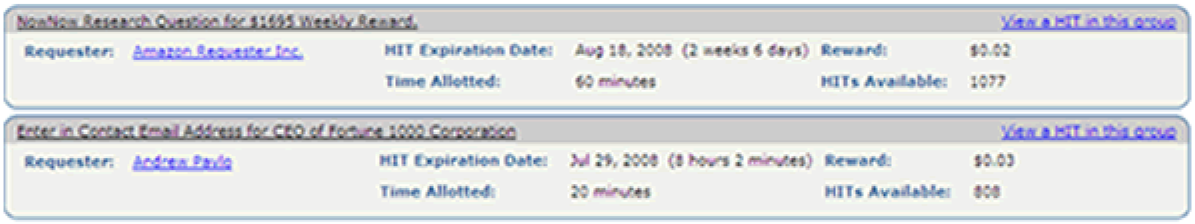
Concepts

Topics

This section explains the concepts and terminology you need to understand how to use the Amazon Mechanical Turk RUI.

Mechanical Turk Concepts and Terminology

Using Mechanical Turk, you pay Workers to complete a task, called a *human intelligence task* (HIT). A HIT, for example, can ask Workers to identify the landmarks in a photo. The following image shows two HITs listed on the Amazon Mechanical Turk web site.



You pay Workers per HIT for their work. You determine how much you want to pay Workers to complete your HITs. To pay the Workers, you must have an Amazon Payment account, which you fund using a credit card or bank account.

The RUI is optimized for publishing a large number of related HITs, called a *batch* of HITs. For example, you might ask Workers to tag each photo in your product catalog. Each HIT would contain one product photo.

The HIT itself has basic properties, such as how long the batch of HITs is available to work on before they expire, how long the Worker is permitted to work on one HIT, and when the work is automatically approved if you don't explicitly approve or reject it. If you are not satisfied with the work, you can reject the work before it is automatically approved and thus not pay for the work done.

When a Worker gets a HIT to work on, the HIT is *assigned* to the worker and the HIT is the Worker's *assignment*. While it is common for one assignment to correspond to one HIT, there are times when multiple Workers are assigned to work on the same HIT, for example, for the purpose of gathering opinions.

For more information about Mechanical Turk concepts and terminology, go to the Mechanical Turk FAQ.

Amazon Mechanical Turk Requester User Interface

The Amazon Mechanical Turk Requester user interface (RUI) is optimized to help you publish a batch of HITs with as little effort as possible. The creation of a batch of HITs requires you to do the following:

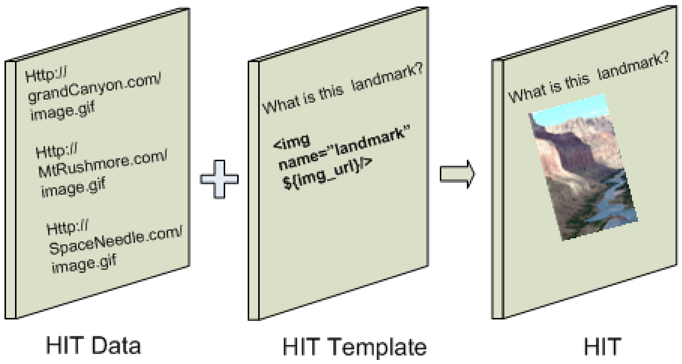
- Design a HIT template

  The HIT template combines an HTML page, which is displayed to Workers when they are working on a HIT, and a set of properties that govern the behavior of the HIT. The properties could be, for example, the amount of time a Worker can keep a HIT to complete the work, or how long the HIT will be available to work on.

  Most of the HTML page is static. Some of it, however, contains placeholders that serve as placeholders for HIT data, such as text, images, or videos, that change with each HIT.
- Provide the HIT data

  HIT data can be text, images, or videos. The HIT data file, which must be formatted as comma-separated values, contains the text and the URLs of images and videos. This data is substituted for the placeholders in the HIT template.

The HIT template and HIT data are merged to create the batch of HITs presented to the Workers, as shown.



In this way a single HIT template is customized by repeatedly inserting HIT data to create multiple HITs. This merging of a HIT template with HIT data is similar, in concept, to a mail merge program in which a list of names is combined with a letter template to produce a customized letter for each name on the list.

For example, if your task is to get Workers to tag 10,000 images, the HIT data would be a file of the 10,000 image URLs and the HIT template would be the HTML page that tells the Worker what to do and include a placeholder for an image. Combining the two would create 10,000 HITs, each one containing the same instructions and having the same HIT properties, but each one containing a different image URL.

As you can see, it's much easier to create the batch of 10,000 HITs using the RUI than it would be to create 10,000 HITs manually.

Let's Start

To use the RUI

1. Go to the RUI: Requester.mturk.com.

   The **Amazon.com Sign In** page displays.

2. Enter your Amazon customer user name and password to sign in.

   Alternately, click **I don't have a customer account**, click **Sign in using our secure server** and follow the instructions for creating a new Amazon customer account.

The RUI uses your Amazon customer login name and password to protect your batch of HITs. This security feature prevents others from editing your HITs. It is important that you keep your login name and password secret.

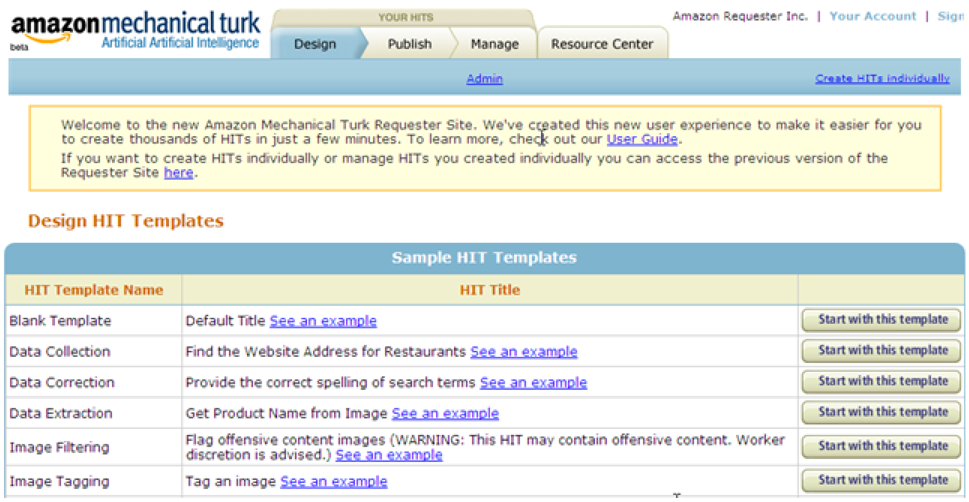
Designing a HIT Template

In this section, you design a HIT template. In it, you will supply the HTML to be displayed to Workers and define HIT properties.

After signing in, the RUI displays the following **Design HIT Templates** page. Across the top of the page are the tabs, **Design**, **Publish**, and **Manage**, that guide you through the process of designing, publishing and managing your batch of HITs.

The Design HIT Templates page has potentially two tables. The first lists any templates that you've already created. The second table, the Sample HIT Templates table, lists sample templates that you can use as your starting point in creating a HIT template.

In the Sample HIT Templates table, the first column lists the names of sample templates that you can customize to meet the needs of your HITs. The second column of the table, **HIT Title**, provides links that show what the sample templates look like.



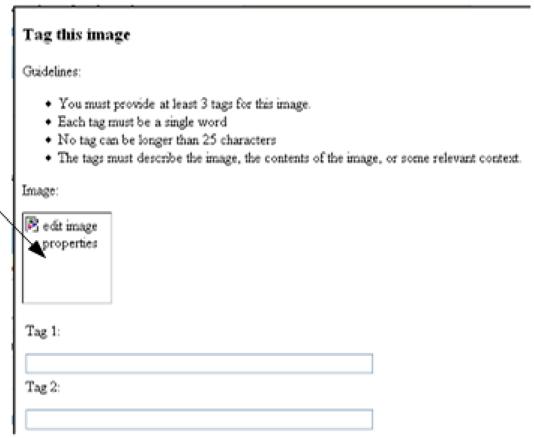
Note

The RUI includes an additional tab, **Resource Center**, which provides links to additional Mechanical Turk information resources, including developer documentation and video tutorials. This tab is unrelated to creating, publishing, or managing batches of HITs.

To choose a HIT template

1. Optionally, click one or more of the **See an example** links to view the associated HTML HIT page. The following figure shows the Image Tagging template.

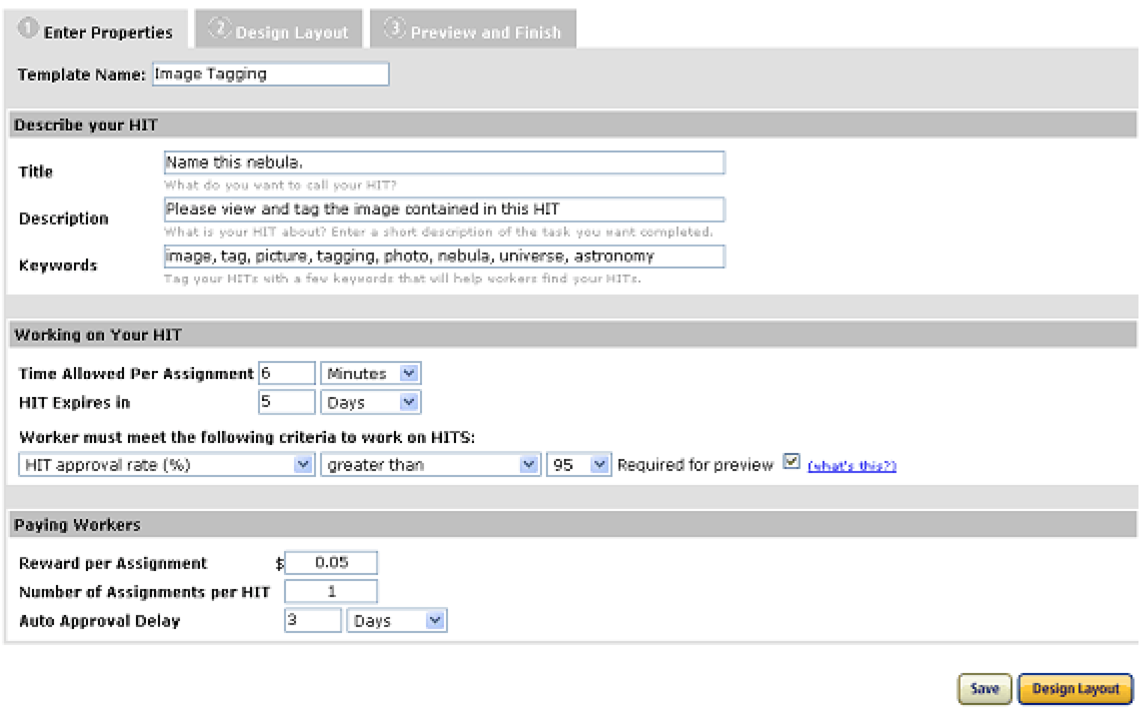
This placeholder will be replaced by your HIT data when you publish your HITs



Close the pop-up window by clicking the **Close** button.

2. Choose a template by clicking one of the **Start with this template** buttons in the last column of the table.

   The RUI displays the following page.



   At the top of the page are three tabs, **Enter Properties**, **Design Layout**, **Preview and Finish**. The first tab enables you to enter the HIT properties that you want applied to all of the HITs in the batch.

3. Fill in the fields according to the specifics of your HIT.

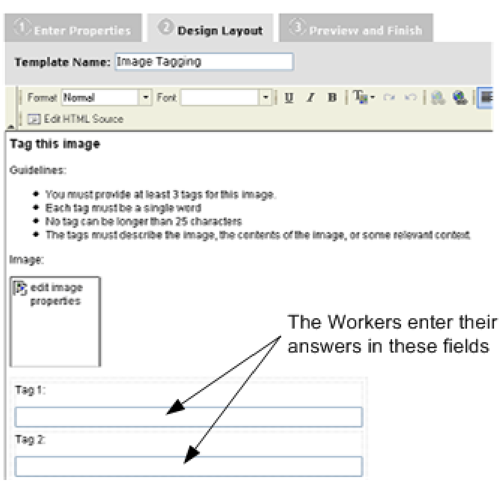
   These fields specify the properties of all of the HITs in the batch. Several fields refer to "assignments." When a Worker gets a HIT to work on, the HIT is *assigned* to the worker and the HIT is the Worker's *assignment*. The assignment belongs exclusively to the Worker and guarantees that the Worker can submit results until the maximum time allowed to work on the HIT has elapsed.

   The following table describes the entry fields.

Field	Description
Template Name	Name of the template. This name is used on the **Design HIT Template** page in the first table, **Your HIT Templates**, shown previously. This name is not displayed to Workers.
Title	The name of the HIT. Make sure to be specific, such as "Tag landmark images" instead of "Tag photos." The title is displayed to Workers.
Description	Describes the HIT. Giving some background, such as the HITs are part of a research project, can help you interest Workers. The description is displayed to Workers.
Keywords	Words that Mechanical Turk Workers uses to search for and find this HIT.
Time Allowed Per Assignment	Specifies the maximum amount of time the Worker has to complete the assignment. Be generous with your allotment. This is not the time it should take a Worker to do a single assignment; it is the amount of time the Worker can keep the assignment. Once this time expires, the assignment is withdrawn from the Worker so others can work on it.
HIT Expires in	Specifies the duration of the batch of HITs, after which the unassigned HITs in the batch are no longer available to Workers.
Worker must meet the following criteria...	This optional field specifies qualifications the Worker must have to work on the HIT. The drop-down menu provides a variety of qualifications and the following drop-down menus provide the specifics of the qualification.
Reward per Assignment	Specifies how much the Worker is paid to successfully complete the HIT.
Number of Assignments per HIT	Specifies the number of Workers you want working on each HIT. Sometimes you might want multiple opinions. In that case, you might assign multiple Workers to work on the same HIT.
Auto Approval Delay	To ensure timely payment to Workers, if you do not approve or reject work explicitly, the work will be automatically approved after this delay.

4. Click the **Design Layout** button.

   The RUI displays the **Design Layout** page, which is the HIT template you chose previously.



5. Use the icons across the top of the page to edit the text on the page.

The icons are similar to the icons used in most word processors. If you point to an icon, a description of its function is displayed.

6. To edit more than the text, click **Edit HTML Source**.

   This changes the display to HTML so that you can edit the HTML directly. You need to do this when you want to change or add placeholders for images or videos, or to change or add HTML constructs, such as tables. The following shows the HTML of the HIT template.

```
<h3>Tag this image</h3>
<p>Guidelines: </p>
<ul class="overview-list">
    <li class="overview-list-item">Name this landmark, for example, the
 Grand Canyon.</li>
    <li class="overview-list-item">Specify the state the landmark is in,
 for example, Arizona.</li>
</ul>
<p>Image:</p>
<p><img width="200" height="200" src="${image_url}" style="margin-right:
 10px;" alt="image_url" /></p>
<table cellspacing="4" cellpadding="0" border="0">
    <tbody>
        <tr>
            <td valign="center">
            <p>Field 1:</p>
            <input type="text" size="25" id="Landmark" name="Field1" /></
td>
            <td valign="center">
            <p>Field 2:</p>
            <input type="text" size="25" id="State" name="Field2" /></td>
        </tr>

    </tbody>
</table>
<p>Please provide any comments you may have below, we appreciate your
 input!</p>
<p><textarea name="comment" cols="80" rows="3"></textarea></p>
```

Tip

You can also develop your HIT page template in your favorite HTML editor and then paste the HTML directly into the **Design Layout** page.

Placeholders in the HTML HIT template are represented in various ways—according to the type of value they represent—as described in the following table.

Value	placeholder Format
text	Dollar sign ($) and curly brackets, for example, `${`**`imageNumber`**`}`
image	HTML image tag, <img>, where the *alt* attribute defines the name of the placeholder, for example: `<img width="200" height="200" alt="imagePlaceholderName" style="margin-right: 10px;" src="${image_url}" />`

Value	placeholder Format
video	HTML object tag, <object>where the *name* attribute defines the name of the placeholder, for example: `<object width="425" height="344"><param name="movie" value="${video_url}"></param><param name="allowFullScreen" value="true"></param><embed src="${video_url}" type="application/x-shockwave-flash" allowfullscreen="true" width="425" height="344"></embed></object>`

Tip

The name of the placeholder must match the column heading for the values in your HIT data file. For example, if the column heading in your HIT data file is "FirstName," the placeholder you would put in your HIT template would be `${FirstName}`.

7. Make the names of the input fields descriptive because they become the column headings in the Results table.

   Results are returned in a table and that table is stored in a comma-separated-value file with the extension, .csv. The number of answers in one HIT specifies the number of columns in the Results table. One row in the Results table represents a complete set of answers for one HIT.

   The following example shows a table of input fields that are submitted as an HTML form, where the *name* attribute defines the name of the column header in the Results table.

```
<table cellspacing="4" cellpadding="0" border="0">
  <tbody>
    <tr>
      <td valign="center">
        <p>Field 1:</p>
        <input type="text" name="Landmark_Name" id="Field1" size="25" /></
td>
      <td valign="center">
        <p>Field 2:</p>
      <input type="text" name="State" id="Field2" size="25" /></td>
    </tr>
  </tbody>
</table>
```

8. When you finish revising the HTML HIT page, click **Preview and Finish**.

   The RUI displays the page as it will appear to Workers.

9. Click **Finish**.
   The RUI displays with the Publish tab selected.

You have set the HIT properties for all of the HITs in your batch and designed the HTML HIT page that Workers working on your HITs will see. Now, you need to publish the batch to make it available to Workers.

Publishing Your Batch of HITs

Publishing your HITs enables Workers to view and work on your HITs. Publishing requires that you upload your HIT data file so the RUI can merge the HIT template you created with the HIT data.

HIT data must be contained in a file where commas separate the values. The most common file extension for such a comma-separated-value file is .csv. Many spreadsheet applications, including Microsoft Excel, can save the file as a .csv file. If you forget to save the spreadsheet as a .csv file, the RUI can't create your batch of HITs.

Important

The Requiester UI doesn't support line breaks in the CSV between cells nor does it support "\r" as a line break character, which is inserted if the Microsoft Excel table is converted into a CSV file on an Apple Macintosh computer.

Each column in your spreadsheet represents one of the placeholders included in the HIT template, and one row of the spreadsheet comprises all of the values for all of the placeholders in one HIT. For example, if you have 10,000 photos of landmarks to catalog, you would have 10,000 rows in your spreadsheet. If each HIT contained three placeholders, such as type, name, and image URL, the spreadsheet would have three columns, as shown in the following table.

Type	Name	Image URL
Type 1	Landmark 1	http://www.myServer.com/images/image1.gif
Type 2	Landmark 2	http://www.myServer.com/images/image2.gif

Type	Name	Image URL
Type 3	Landmark 3	http://www.myServer.com/images/image3.gif
Type 4	Landmark 4	http://www.myServer.com/images/image4.gif

The .csv file must have column headings that match the names of the placeholders in the HIT template.

Note

The order in which you present the placeholders in the HIT template does not need to match the order of columns in the .csv file.

If you are using images or videos in your HIT, you must include links to those images or videos, as shown in the previous example. These images or videos must be publicly accessible.

Note

The RUI does not provide a tool for uploading the images or videos to a server.

To publish a batch of HITs

1. Click the **Publish** tab on the RUI.
   The RUI displays the **Select HIT Template** page.

   Notice the four, numbered circles that mark your progress through the publishing process.
2. Click **Select** beside the HIT template you want to create your HITs.
   The RUI displays the **Upload Input Data** page.

Tip

Click **Click here** if you're unclear what your .csv file should look like. The RUI displays a sample spreadsheet with the name of the placeholders as column headers. You can then fill in the HIT data in the columns and rows.

3. Click **Browse** to locate the .csv file that you want to upload.
4. Click **Upload** to upload the specified .csv file.

5. Click **Next** to preview how your HITS will look to Workers. You can preview up to two-hundred HITs with your real HIT data.

   The RUI displays the Preview page.

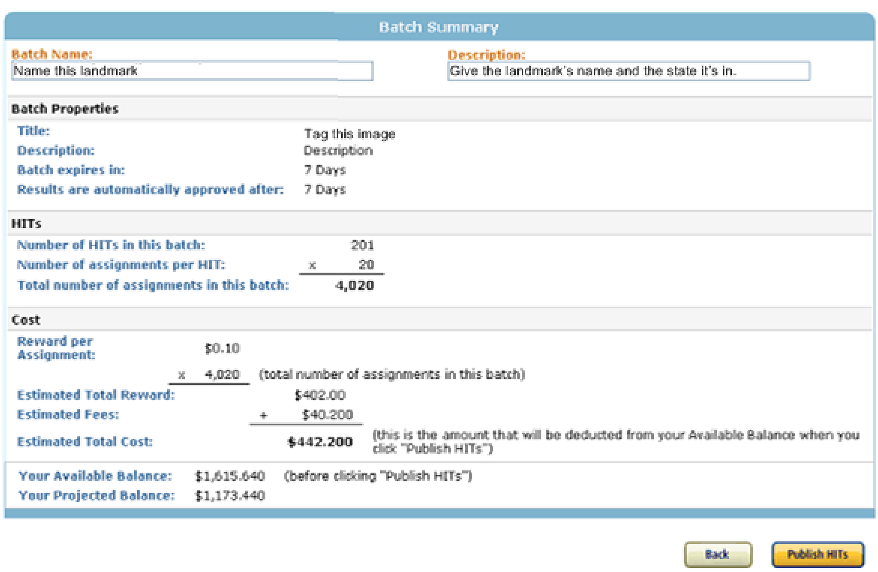
6. To see the next HIT, click **Next HIT**.

Tip

To use a different, previously-loaded .csv file, click **Select a Different Input File**.

7. When you finish previewing your HITs, click **Next**.

   The RUI displays the **Batch Summary** page.



   This page shows the total cost you will pay Workers if all of your HITs are successfully completed.

8. Click **Publish HITs** if you are ready to publish the batch of HITs. Otherwise, click **Back**.

   If you click **Publish HITs**, the RUI displays with the **Manage** tab selected.

Managing Your HITs

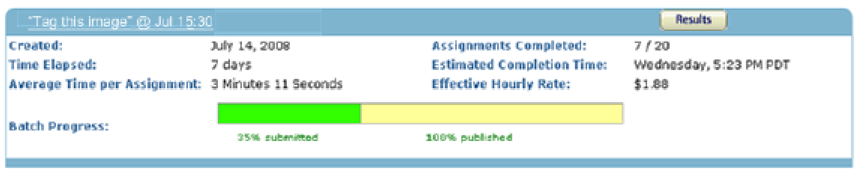
Topics

Now that you've published your batch of HITs, you use the **Manage** tab to view the results, filter the results, and approve or reject the work.

Displaying HIT Results

To display the HIT results

1. Click the **Manage** tab at the top of the RUI.
   The RUI displays the **Manage HITs** page.



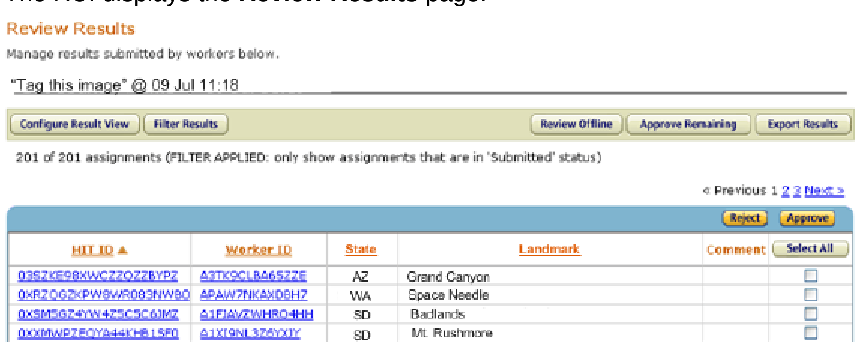
   The progress bar shows two quantities:

   - **% submitted—**Percentage of HITs in your batch that have been completed by Workers.
   - **% published—**Percentage of HITs in your batch that have been published for Workers to work on.

   Tip

   While most batches publish quickly, extremely large batches can take several minutes to publish.

2. Click the **Results** button on the HIT results of interest.
   The RUI displays the **Review Results** page.



Configuring Data on the Results Page

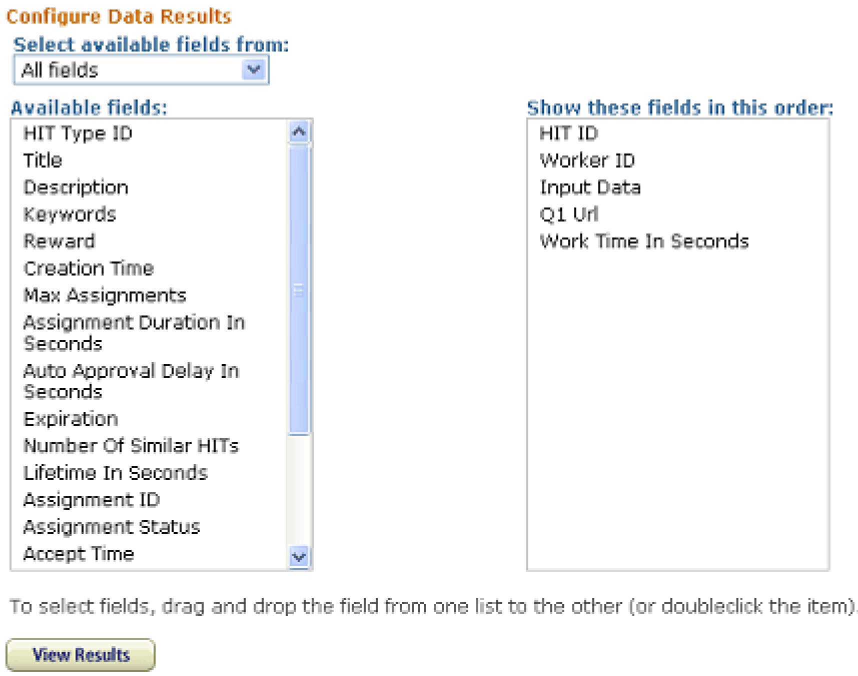
Topics

- Sorting Results by Worker (p. 14)

To configure the data on the Review Results page

1. Click **Configure Result View**.

   The **Configure Data Results** page displays, as shown.



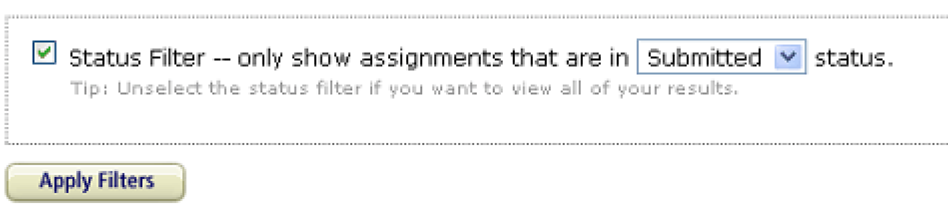
To...	Do This...
Change the fields listed in the results	Drag field names into or out of the **Show these fields in this order** list from and to the **Available fields** list.
Change the order of the fields in the results	In the **Show these fields in this order** list, drag the fields up or down to change the order in which they're displayed.
View the reconfigured results	Click **View Results**.

Filtering Results

To filter the results

1. Click **Filter Results**.

   The **Filter Results** page displays.



2. To show HITs of a specified status, click the **Status Filter** check box, then click the drop-down menu, choose **Submitted**, **Approved**, or **Rejected**, and then click **Apply Filters**

Sorting Results by Worker

To sort results by Worker

- Click the Worker ID column heading.

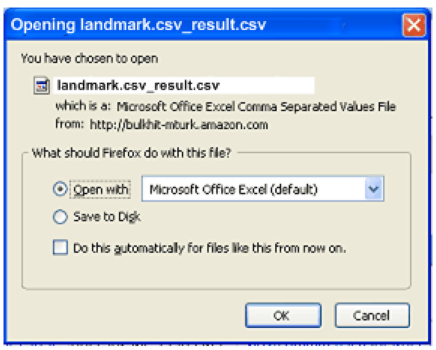
  The rows will be sorted according to the Worker ID.

Downloading HIT Results

To download HIT results

1. Click Export results on the **Review Results** page.

   The RUI displays a dialog box.



   In this dialog box you can choose to do the following:

To...	Do This...
To open and view the results	Click the **Open with** radio button and choose, from the pull down list, the application you want to use to view the results, and click **OK**. The application must be able to display .csv data.
To save the results to disk	Click the **Save to Disk** radio button and click **OK**.
Specify a default activity when you click the **Export Results** button	Click the **Do this automatically for files like this from now on** check box and click **OK**. Doing so automatically performs the action specified by the radio button you selected.

2. Click **Open with Microsoft Office Excel (default)** and click OK.

   The results appear in an Excel spreadsheet. At this point, you can save the spreadsheet.

Approving and Rejecting Work

Topics

You can start reviewing work once it is submitted or when all of the assignments are completed. You can also review the work offline.

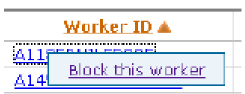
To approve or reject Workers' work

1. To approve or reject the work done, click the check box in the last column on the appropriate HIT.
2. Click **Approve** or **Reject**.
3. Alternately, to accept or reject all of the HITs, click **Select All** and then click **Approve** or **Reject**, respectively. You can also approve all of the HITs by clicking **Approve All**.

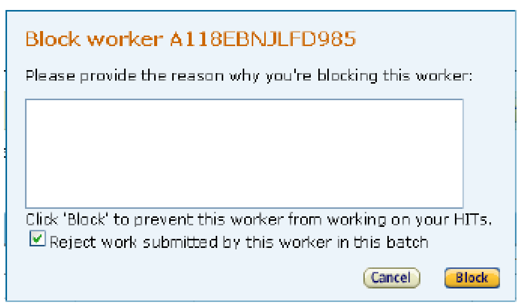
Blocking a Worker and Rejecting Their Work

To block Worker and reject their work

1. Click their Worker ID.
   The RUI displays the **Block this worker link**.



2. Click the link.
   The RUI displays the Block worker pane.

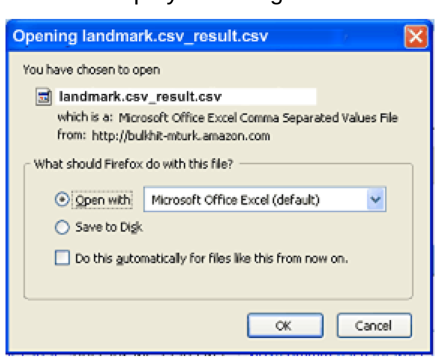


3. Optionally, click the check box to reject all of the Worker's work.
4. Optionally, enter the reason why you are blocking the Worker and/or rejecting their work.
5. Click **Block** to prevent the Worker from ever working on your HITs again.

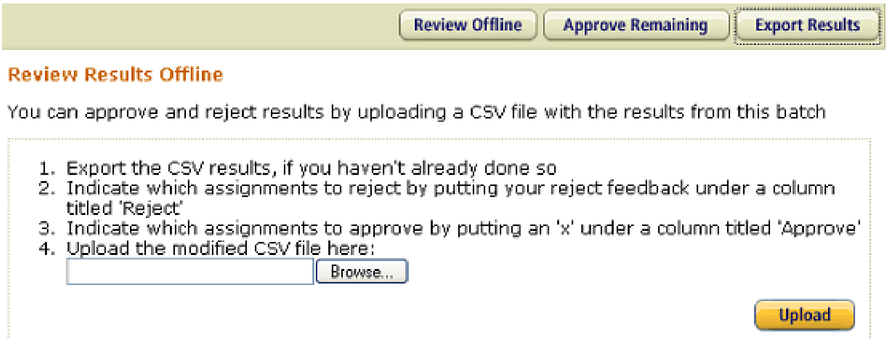
Approving Work Offline

To review work offline

1. Click Export results on the **Review Results** page.
   The RUI displays a dialog box.



2. Click **Open with Microsoft Office Excel (default)** and click OK.
   The results appear in an Excel spreadsheet.
3. Save the spreadsheet as a .csv file.
4. On the **Review Results** page, click **Review Offline**.
   RUI displays the **Review Results Offline** pane, as shown.



5. Click **Browse** and select the .csv file you saved
6. Click **Upload**.
7. Click **Approve Remaining**.

Known Issues

The following is a list of known issues with the Requester User Interface.

Issue	Workaround
"\r" is not supported as a line break character in comma-separated-value (.csv) files.	Do not convert your Excel file to a .csv file on an Apple Macintosh computer. Alternately, remove all occurances of "\r".
The Requester UI does not support line breaks in the CSV between cells, for example: `"cell 1", "cell two with line break", "cell 3"`	Remove all line breaks between cells.