

# REST API for Workflow/Job Related Actions

Most workflow/job related requests are sent via AMP UI (or REST endpoints), upon which AMP generates corresponding REST request to Galaxy endpoints and return the response (sometimes filtered or normalized) to AMP UI. Unless specially noted, below requests are all sent to AMP server, but workflow/job related IDs such as workflowId etc refer to those existing in Galaxy.

## Workflow

- List all workflows currently existing in Galaxy: GET /rest/workflows
- Show details of a particular workflow based on information retrieved from Galaxy: GET /rest/workflows/{workflowId}

## Workflow Results

- Get a list of all workflow results satisfying the given query: POST /rest/workflow-results
- Refresh the whole WorkflowResults table iteratively by retrieving and processing workflow invocations per primaryfile, unless the lumpsum mode is specified and true, in which case, retrieve and process all workflow invocations at once: POST /rest/workflow-results/refresh
- Set the WorkflowResults matching the given list of workflow-step-output maps as relevant/irrelevant, and update their corresponding output datasets in Galaxy as visible/invisible accordingly.  
Note: if a wild card is used in a field of a search criteria map, then that criteria match all values of that field: POST /rest/workflow-results/relevant?relevant={relevant}
- Sets the specified WorkflowResult according to the specified final status POST /rest/workflow-results/{id}?isFinal={isFinal}
- Set and export workflow result csv file as part of response POST /rest/workflow-results/export

## Job

- Create AMP jobs by submitting to Galaxy the given workflow against the given primaryfiles, along with the given parameters: POST /rest/jobs/submitFiles?workflowId={workflowId}&primaryfileIds={primaryfileId1, primaryfileId1, ...}
- Create a bundle of AMP jobs, one for each primaryfile included in the given bundle, by submitting to Galaxy the given workflow with the given step parameters : POST /rest/jobs/submitBundle?workflowId={workflowId}&bundleId={bundleId}
- Create AMP jobs, one for each row of WorkflowResult outputs specified in the given list of arrays, to invoke the given workflow in Galaxy along with the given parameters, including their associated primaryfile as the first input if the given indicator is true: POST /rest/jobs/submitResults?workflowId={workflowId}&resultIdss={id1, id2, id3}
- Create AMP jobs, one for each row of primaryfile and outputs specified in the given csvFile, by submitting to Galaxy the given workflow along with the given parameters: POST /rest/jobs/submitCsv?workflowId={workflowId}
- List all AMP jobs with step details, i.e. all workflow invocations submitted via AMP UI to Galaxy: GET /rest/jobs/details
- List all AMP jobs (corresponding to Galaxy workflow invocations) that have been run with a particular workflow on a particular primaryfile:
  - GET /jobs?workflowId={workflowId}&primaryfileId={primaryfileId}
  - Note: workflowId is the same Galaxy workflow ID used to submit an AMP job
  - Example: /jobs?workflowId=0a248a1f62a0cc04&primaryfileId=35
- Show brief information of the inquired AMP job, which includes basic information of each step within the job:
  - GET /jobs/invokeId?workflowId=0a248a1f62a0cc04
  - Note: invokeId is the ID of the invocation, which is returned when request to list jobs
  - Example: /jobs/33c1d4ca9f8bc33c?workflowId=0a248a1f62a0cc04
- Show detailed information of the inquired step within the inquired AMP job:
  - GET /jobs/{invokeId}/steps/{stepId}
  - Note: stepId is the ID of the step within an invocation; it's returned when request to show an AMP job.
  - Example: /jobs/33c1d4ca9f8bc33c/steps/747a3db1339e88fd?workflowId=0a248a1f62a0cc04
- Show detailed information of the inquired AMP job step output:
  - GET /jobs/{invokeId}/steps/{stepId}/outputs/{datasetId}
  - Note: datasetId is the ID of the output produced by the invocation step, which is returned in the outputs map when request to show an AMP job step.
  - Example: /jobs/33c1d4ca9f8bc33c/steps/a48a0c0293ce7a88/outputs/73653f4d5050866e?workflowId=0a248a1f62a0cc04

## Bag

- Retrieve the output bag for a primaryfile by ID:
  - GET /rest/bags/primaryfile/{primaryfileId}
  - Example: /rest/bags/primaryfile/35
- Retrieve the output bag for an item by ID:
  - GET /rest/bags/item/{itemId}
  - Example: /rest/bags/item/6
- Retrieve the output bag for an item by external source and ID:
  - GET /rest/bags/item?externalSource={externalSource}&externalId={externalId}
  - Example: /rest/bags/item?externalSource=src1&externalId=id1
- Retrieve the output bag for a collection by ID:
  - GET /rest/bags/collection/{collectionId}
  - Example: /rest/bags/collection/2
- Retrieve the output bag for a collection by its unit name and its name:
  - GET /rest/bags/collection?unitName={unitName}&collectionName={collectionName}
  - Example: /rest/bags/collection?unitName=Unit1&collectionName=Collection2

Note: If the above specified primaryfile/item/collection doesn't exist or is not unique (searched by the request parameter provided), an error message will be returned with a 500 status.

## Human MGMS

- Compares authString with the combination of User Supplied Token and Input file path: GET /rest/hmgm/authorize-editor?authString={authString}&userToken={userToken}&editorInput={editorInput}
- Get the transcript. If a temporary version exists, get that version. Reset Flag will delete the temporary version and serve the original transcript: GET /rest/hmgm/transcript-editor?datasetPath=\${datasetPath}&reset=\${reset}
- Save a temporary copy of the transcript by adding the .tmp extension to the original filename: POST /rest/hmgm/transcript-editor
- Complete edits of the transcript by copying the current state of the transcript to a new file with the .complete extension: POST /rest/hmgm/transcript-editor/complete
- Get the IIF manifest as the input resource for the NER Timeliner editor. If a temporary version exists, get that version: GET /rest/hmgm/ner-editor?resourcePath={resourcePath}
- Save a temporary copy of the manifest being edited in NER editor by adding the .tmp extension to the original file name: POST /rest/hmgm/ner-editor?resourcePath={resourcePath}
- Complete edits of the manifest by moving the current saved .tmp file to a new file with the .complete extension: POST /rest/hmgm/ner-editor/complete?resourcePath={resourcePath}
- Delete the temporary version file saved by NER editor, so that the original resource will be used next time the editor is reloaded. POST /rest/hmgm/ner-editor/reset

## Deliverables

- Deliver final results associated with the given item to Avalon as related items of the corresponding media object: POST /rest/deliver/avalon/item/{itemId}
- Deliver final results associated with the items within the given collection to Avalon. POST /rest/deliver/avalon/collection/{collectionId}

## Batch

- Batch Process Validates a batch manifest CSV to create primary files, supplements, and also move files to their destination directory: POST /rest/batch/ingest