Manual for exporting WS-PGRADE workflow from WS-PGRADE portals to the SHIWA Repository

This manual will aim to instruct workflow developers how to export WS-PGRADE workflows from to the University of Westminster hosted SHIWA repository. There are two options: automatic direct export (See Section 1) or automatic indirect export (See Section 2).

1. Automatic direct export (SCI-BUS Community Portal -> SHIWA Repository)

This method can only be used if your WS-PGRADE portal is of version 3.5.6 or above. The recommended portal version is 3.5.8. This export method may fail if the University of Westminster's firewall blocks the export process. In this case we recommend to use the automatic indirect export method.

Pre-requisites:

- Developer account in the SHIWA Repository
  If you do not have a SHIWA Repository account, send an email to weingan@wmin.ac.uk to request an account.
- Group to which the workflow is to be uploaded
  Please check in the repository whether you are already a member of an appropriate group to associate your workflow with. If you know of a group owner, they can join you to a group. Failing the above, please create an appropriate group. You will be able to change the group association of the workflow at a future date.

1.1 Exporting workflows:

- From the *Workflow>Concrete page*, click **Export** to export a workflow.
- Select the destination of the export operation as the *Remote SHIWA Repository*.
- Specify your username and password for your SHIWA Repository account.
- The click **Get Groups** to get the list of groups of which you are a member – and select the **Group** to which the exported workflow should belong (this selection can be changed from the SHIWA Repository at a later date).
- Next, on the same page you can save inputs with the sample data set or as a dependency, and these can be configured to be mandatory or modifiable.
- You should export the workflow in the *WS-PGRADE/gUSE format*.
- If the workflow is successfully exported, an acknowledgement will be received.

1.2 Renaming workflows:

If a workflow with that name already exists in the SHIWA Repository, the repository will not allow exporting the workflow with that name. To resolve this issue, follow the below steps to clone the workflow in your WS-PGRADE portal, to a concrete workflow with a different name:

- Go to *Workflow>Create Concrete*
- Create a workflow using the *Different Workflow* option and select the existing workflow to be renamed and cloned.
- Specify a *new name of the cloned workflow*.
- Click **OK**.

2. Automatic indirect export (SCI-BUS Community Portal -> SHIWA Portal -> SHIWA Repository)

If you do not have portal version of 3.5.6 or up or you were refused to export a workflow due to firewall restrictions you are recommended to create a zip file of your workflow on your WS-PGRADE portal, upload it to the UoW hosted SHIWA Portal and export it from this portal to the UoW hosted SHIWA Repository to avoid portal version and firewall issues.

Pre-requisites:

- Developer account in the SHIWA Portal
  If you do not have a SHIWA Portal account, send an email to weingan@wmin.ac.uk to request an account.
- Developer account in the SHIWA Repository
  If you do not have a SHIWA Repository account, send an email to weingan@wmin.ac.uk to request an account.
- Group to which the workflow is to be uploaded

  Please check in the repository whether you are already a member of an appropriate group to associate your workflow with. If you know of a group owner, they can join you to a group. Failing the above, please create an appropriate group. You will be able to change the group association of the workflow at a future date.

2.1 Export operation:

- In your WS-PGRADE portal, go to *Storage>Local*
- Click on **GetAll** to download a zipfile of the workflow you want to export.
- Now login to the SHIWA Portal
  https://shiwa-portal2.cpc.wmin.ac.uk/liferay-portal-6.1.0/web/guest/home
- If you already have an account on the SHIWA portal, please use it.

  Note: SHIWA Portal accounts are not synchronised with SHIWA Repository accounts.

- If you do not have a SHIWA Portal account, send an email to weingan@wmin.ac.uk to request an account. State that the account is required for workflow export operation. Having this info the portal sysadmin can provide extra support as required.
- Once you have logged in to the SHIWA Portal, go to *Workflow>Upload*, browse for and upload the zipfile of the workflow you had extracted from your WS-GRADE portal.
  - At this stage you can specify the name of the new workflow in the SHIWA Portal, if the workflow requires renaming, this can be done here.
- From the *Workflow>Concrete* page, click **Export** for the workflow to be exported.
- Select the destination of the export operation as the *Remote SHIWA Repository*.
- Specify your username and password for your SHIWA Repository account.
- The click **Get Groups** to get the list of groups of which you are a member – and select the **Group** to which the exported workflow should belong (this selection can be changed from the SHIWA Repository at a later date).
- Next, on the same page you can save inputs with the sample data set or as a dependency, and these can be configured to be mandatory or modifiable.
- You should export the workflow in the *WS-PGRADE/gUSE format*.
- If the workflow is successfully exported, an acknowledgement will be received.

3. Completing the export process:

Once the workflow has been exported, you can add extra information to your workflow and/or you can change access rights, attributes, etc. (See below) in the SHIWA Repository. Adding this information is not compulsory but it is strongly recommended.

- Login to the SHIWA Repository and go to *Home > My Workflows*, to be able to complete the workflow export process:
- Select and specify *Workflow>Details>Description*:
  o This should be a plain text describing the abstract workflow. Feel free to use extracts from published papers relating to the research which resulted in this workflow.
- Select and define *Workflow>Access* :
  o Decide on the level of access you want to grant group members.
  o Decide on the level of access you want to grant to any workflow developer who logs into the SHIWA repository.
  o A workflow should only be marked as public once you are confident that it is of sufficient standard, and the details have been completed to make it something to be proud of, which anyone can view. You are not recommended to make the workflow public at this stage.
- Select and specify *Workflow>Attributes* :
  o Please complete the *dataset's description*.
  o Please specify the *tasktype*.
  o It is very important for you to specify the *domain* and *subdomain* – should the desired domain or subdomain not be on offer, please follow the onscreen instructions.
  o You can also specify several *keywords* relating to the workflow.
- Select and describe the *Workflow>Implementations*:
  o You will find an implementation listed here, and by clicking on it, you will be able modify the implementation.
- Select *Implementation > Details*:
  o The *Engine version* should relate to your native ws-pgrade portal. In the event that your native ws-pgrade portal's version number is not listed, contact the administrator.
- Select *Implementation > Visibility*:
  o An implementation should only be marked as public once you are confident that it is of sufficient standard, and the details have been completed. You are not recommended to make the implementation public at this stage.
- Select *Implementation > Attributes*:
  o Add *dependencies* and *configurations* as required.
  o Give the implementation a *description*.
  o Please specify information as to *rights*, *licences* and *keywords*.
- Upload the *graph* of your *workflow* to the repository:
  o Take a screenshot of the graph of your workflow.
  o Upload the file to Implementation > Files.
  o Edit the Implementation > Attributes > Graph, and select the uploaded workflow graph.