Automatic Submission

Every comp you want to render from an After Effects project needs to be submitted as its own Job in Smedge. However, this process is made very easy with the After Effects script file included in the Smedge distribution.

1. Create your AE Project. Queue all of the renders you want to queue, and set up all of the queued render settings normally.
    - Make sure to only render image file sequences when rendering on a network. Rendering movie files will not work correctly.
    - Make sure that the source and destination image paths in your project are capable of being accessed by the render engines. Paths relative to the local hard drive may have unexpected results.
2. Save the AE Project in a path that can be accessed by the render engines.
3. Use the **smedge_render_queue.jsx** script to automatically submit every queued comp as a Job in Smedge.
    - The script uses hard coded values or default values for Smedge Job settings. You can customize this behavior by editing the script to use different values, or you can expand the script to include a UI to set these values when it is run
    - The script needs to have the location to the **Submit** command line shell application set in order to work. Be sure to edit the script to point to where Submit is installed on your system before you use it for the first time.

Manual Submission

If you want to submit a comp manually, these are the steps you can perform in SmedgeGui to do so:

1. In SmedgeGui, select Job > New Job
2. Select “After Effects” as the **Product**.
3. In the *Type Specific Parameters* section, set the **Project File**. You can use the browse button to find it.
    - When you select the project file, Smedge automatically generates a job name with the project filename. This will overwrite anything you may have previously typed into the **Name** field. You can disable this automatic detection in the SmedgeGui Options dialog.

- Remember to browse to the network location, not the location on a local hard drive.

4. Enter the frame range of the comp in the **Range** field.
5. Set the number of frames that each render engine will render at one time in the **Packet Size** field.
6. Set the name of the comp you want to render in the **Comp Name** field. You must create a separate Smedge Job for every comp in a project. Smedge's Find and Replace system makes this easy. See below.

    - When you change the comp name, Smedge automatically generates a job name with the project file and the comp name together. This will overwrite anything you may have previously typed into the **Name** field. You can disable this automatic detection in the SmedgeGui Options dialog.

7. Adjust any of the settings in the *Basic Job Info* area, if you wish. You can adjust the details of how After Effects will operate with the **Extra Parameter** field, if you wish, but this is not recommended unless you know how the aerender program operates. Leave the other tabs in the Submit Job window in their default state unless you have a specific reason to adjust them, or are instructed to by Überware technical support.

    - Some *Advanced Parameters* that may come in handy:

      Stagger Start is useful if your network is slow and you have large project files. This will have Smedge automatically stagger the actual render start in order to ease network traffic

      Job Usage Limit will allow you to limit the job from taking up all available nodes. For instance, if you have a long render that is a low priority, set it to use only 2 machines at a time, leaving the other machines available for other more pressing work that may come up. You can accomplish more sophisticated queuing with Pools.

      Overtime Kill Ratio if you have a machine that seems to hang sometimes, this will catch it and restart the work if it goes over this many times the average work time for the job. If you have a project that has frame render times that vary widely, or if you have a wide variety of speed machines in your network, you may need to increase this number.

    - What *Event Commands* do

      You can attach a command line that will execute at specific points during the Smedge work processing, on both the Engine and the Master. These command lines can use parameter values from the Job or Work being processed, and substitute those values into the command line when it is executed. This is useful if you want to save logs of your network usage or work operations, or can be used to perform pre- or post-processing of your jobs.

- What the *Custom Pool* does

  You can single out machines here that will be included or excluded from the Job. Note that if you are using the “Whole System” feature (which is on by default) and have selected “Whole System” as the Pool for the job all machines will automatically be included for work, so anything selected in the *Include Engines* list will be ignored. You may find this tab useful if you have a machine that is not crashing with a specific Project. Pools provide more sophisticated control over distribution.

If your AE Project has only 1 comp to render, you are done. Click **OK** to submit the Job to Smedge.

If you want to submit other comps from the same project file, click the **Submit Copy** button to enter the Job as it is shown. Now you can adjust any settings you need for the next comp to render from this project. If you have more than one setting that is changing in the same manner, you can use the Find and Replace feature by clicking the **Replace** button. You can then put in the text you want find, and what you want to replace it with. Smedge will then perform the replacement in every field on every tab. Click **Submit Copy** again to submit the second job, and repeat for every comp.

Alternatively, you can click the **Copy** button to open up a second (or more) Submit Job window with the same settings. Adjust this dialog, and press **Copy** as many times as needed, then click **OK** on each one.

Fun Optional SmedgeGui configuration

If you have an image sequence viewing program installed on your workstation, you can configure SmedgeGui to use it to view the image sequences rendered by After Effects Jobs.

1. Select **System** > **SmedgeGui Options…**.
2. In the *Product Options* area, select "AfterEffects" in the **Product** selector.
3. You can configure the command line to start the image viewer for both single frames and for sequences. Smedge uses a variable substitution system to access the Job parameters. See the Parameters chapter in the Administrator Manual for more information on Parameters.

   If you use Autodesk Maya, and want to use fcheck, the settings can be copied from the Maya Product, which is configured to use fcheck for both single frames and sequences. If you use another viewer program, you can customize how Smedge will access it by looking at that program's command line interface.

   For single frame viewing, you use the parameter string $(Note.Enquote).

   For sequence viewing, you can use the parameter name $(SequenceName.Enquote) if you need Smedge to generate a sequence formatting string for the image viewer. The **Sequence Format Specifier** is the string that is substituted for the frame numbers, and the you can specify if the format specifier must be repeated for zero padding by using the **Repeat Format Specifier** option.

   To get the frame range of the sequence, use the $(Range) parameter to get the range formatted as *start-end*, or you can access the start and end values individually by using the appropriate command version: $(Range.Start) or $(Range.End)
4. Press **OK**.

When your Jobs render, Smedge can automatically detect the image filenames as they are created. It uses this information to test that the frames are rendering completely, but you can also now use the commands to view the frame or the frame sequence available in the Job and Work menus.

Configuring Smedge Engines to use After Effects

1. Set up and license After Effects on each machine.
    - You can use either a Full Installation or a Render Engine installation
    - Make sure that any plugins that you require have also been installed and licensed on every render engine.
2. Set up Smedge on each machine. Generally you will use the "Engine" installation type.
3. Open SmedgeGui and select all of your Engines
4. Select **Engine** > **Configure Engine Settings…**
5. Make sure that "AfterEffects" is highlighted in the list of **Enabled Products**. If it is not, click on it to highlight it, and then click the button with the red triangles next to the product list. This will copy the change setting to every Engine that you selected in step 3.
6. Click on the *Product Options* tab. (This is the tab that is opened by the menu command **Engine > Configure Product Options…**)
7. Select "AfterEffects" from the list of **Products**.
8. Set the **Path to the Executable**, if you have not set the aerender program file to be in the PATH as part of your After Effects installation.
9. If you want to have Smedge try to remap network drives on Windows, then you can configure that in the **Resources** field, and optionally supply a **Username** and **Password** to access the file server. Note that the account that is used to run the SmedgeEngine process must have permission to map network drives for this to work. See the Smedge Installation Guide for more information.
    - An alternative to using mapped network drives on Windows is to use UNC paths. UNC paths do not require any additional permission to be used on the local machine. You can browse for files with UNC paths by browsing through "My Network Places".
10. If you want to configure Pools, click on the *Pools* tab. (This is the tab that is opened by the menu command **Engine > Configure Pools…**)
    - How Pools work:

      Every Engine can belong to zero or more Pools. The Engine orders these pools. Work from Jobs assigned to a Pool that is a higher priority for this engine will get distributed to this engine before work from any Jobs assigned to Pools that are lower in the priority list.

      Pool distribution is done before priority distribution. This means that a Job with a higher **Priority** may not actually get priority on this machine if that

Job is assigned to a **Pool** that is a lower priority for this engine. This is useful to give different projects priority on machines, so that every project gets some workers.

11. Click **OK** to submit the changes to the system.

Notes

These instructions are designed for Smedge 3 verison 2.4. Earlier and later versions may operate differently.

These instructions have been tested with AfterEffects 7.0 and CS3, but should work with AfterEffects 6.0 and up.