

SMEDGE

What's New in Smedge

Smedge 2019

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Welcome to Smedge 2019!



The latest version of Smedge provides a whole new level of performance and reliability, and gives you more control over your rendering workflow than ever before. Production tested on networks over 1,500 nodes, scaling is no problem.

We recommend that you back up any old data before upgrading. While the data can be upgraded automatically, if you ever want to go back to the old version of Smedge, the upgraded data will not be successfully read by the old versions.

As always, if you have any questions about new features or our future development plans, we encourage you to contact us.

Thanks, and see you in Smedge!

All Job parameters are now in the dynamic value system

Previously, Smedge handled the basic job data (like the name, pool, and priority of a job) in a different way than all the product specific parameters (like the scene file name or frame range), even though most jobs also shared most of those parameters. This inconsistency internally was hidden from the users most of the time, other than the Submit Job dialog, where these parameters were not part of the dynamic property lists. The inconsistency has been removed now, and the Submit Job dialog has been redesigned a bit to take advantage of this.

All properties are now in the dynamic property grid list. Some parameters appear in a different place on the window than in prior versions. A few parameters are in a different form than before. Most obvious is that the “Paused” check box is removed and the “Status” choice selector leaves you with the options “Pending” or “Paused”. (This is because the same control can show all of the status values for a job, but at job creation time, only these two status values make any sense.)

All products can distribute by CPUs, GPUs, or RAM

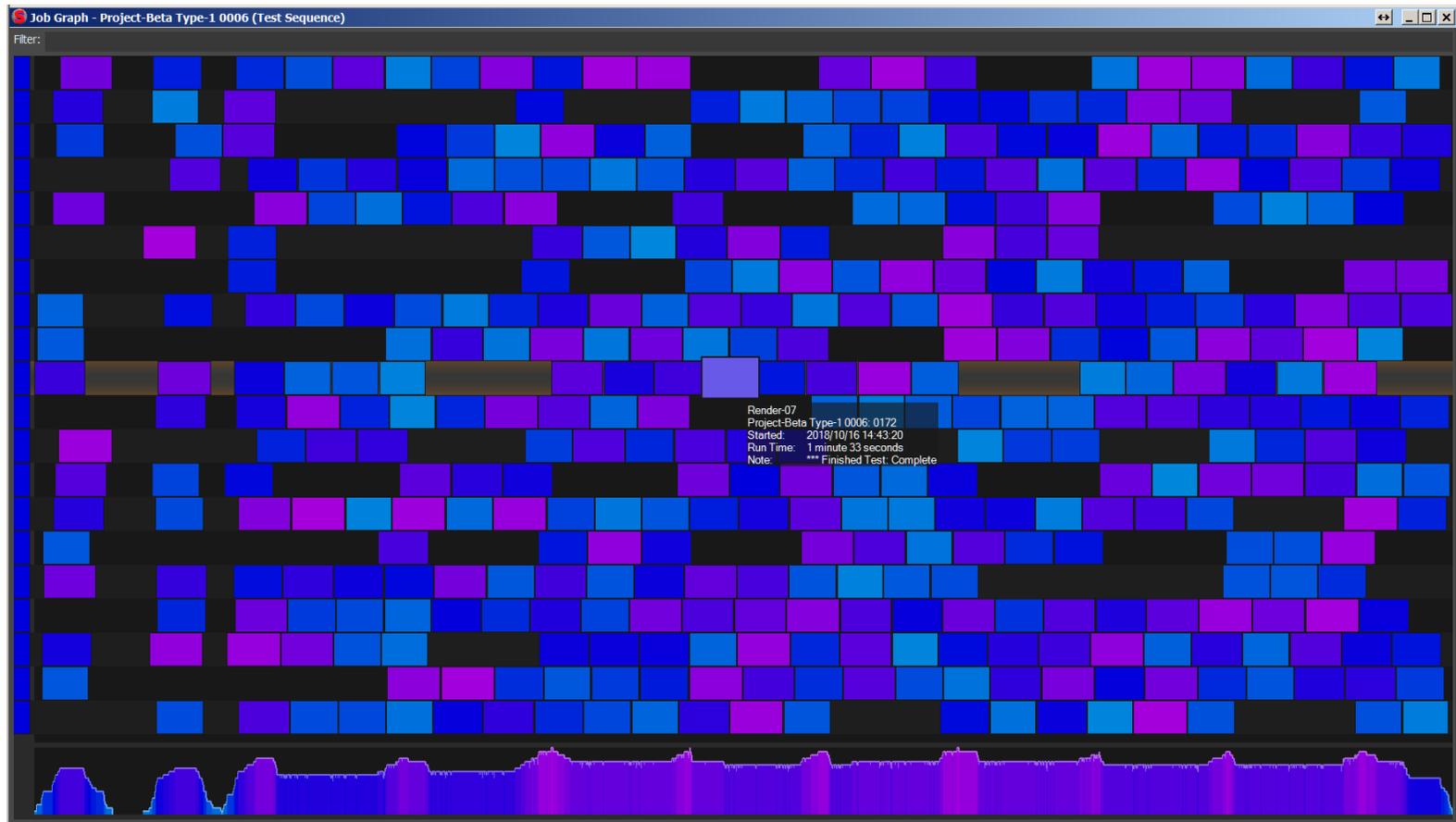
The settings to allow GPU distribution have been moved to the base Job class so they are available for every product in Smedge by default. Additionally, the system to allow CPU/RAM distribution has been simplified. All systems are now available for all jobs at all times. The default values will cause a job not to request any RAM or GPU, so default jobs will work the same as they always have before, but you can submit jobs to use any system at any time.

Alternate Work Staggering Modes

There is a new Job parameter called StaggerMode that lets you set how the staggering works for a specific job. You now have 3 options for how you want work to be staggered:

Value	Meaning
0	All work from the job is staggered (like how Smedge worked in 2018 and earlier)
1	Stagger work on an Engine but not Engines. If a job doesn't use all of the resources available on a specific engine, multiple work may start on that engine only after the staggering limits are observed. But if multiple engines are working on the job, they can all start at the same time.
2	Stagger Engines but not work on an Engine. If a job doesn't use all of the resources available on a specific engine, multiple work may start on that engine at the same time, but if multiple engines are working on that job, work sent to each engine will respect the staggering limits.

Work Chart Info Panel

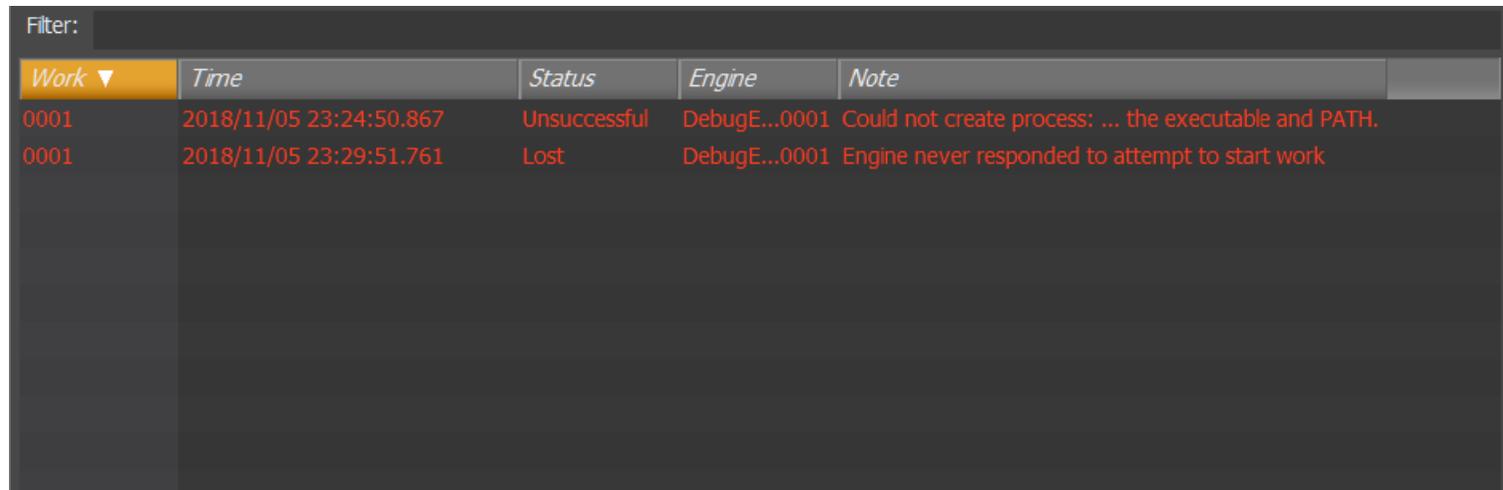


New graphical view of your job's history charts every work unit using the engine as the Y axis and real time as the X axis. You can more easily see engines with performance issues or having trouble, as well as just get a nice overview of how your rendering is progressing or elapsed over time. Mouse over an item in the chart to get more details, and right click to access further operations, including remote connecting to the engine or viewing the process output. You can also use the filter field at the top of the graph to highlight specific work units from the Job.

Expanded graph panel functionality

Besides the new graph, the histogram and heat map views have been separated to their own panels and have added functionality, including being able to right click on items to view the output or remote connect to the Engine, as well as a filter field to highlight specific work units from the Job.

Job Errors Info Panel



The screenshot shows a 'Job Errors Info Panel' with a 'Filter:' field at the top. Below it is a table with columns: 'Work', 'Time', 'Status', 'Engine', and 'Note'. The 'Work' column has a dropdown arrow. Two error entries are visible:

Work	Time	Status	Engine	Note
0001	2018/11/05 23:24:50.867	Unsuccessful	DebugE...0001	Could not create process: ... the executable and PATH.
0001	2018/11/05 23:29:51.761	Lost	DebugE...0001	Engine never responded to attempt to start work

There is a new info panel associated with Jobs that shows only job history elements that indicate errors from that job. The list is filterable by using the filter field at the top of the panel. You can right click on items in the list for more options, including remote connecting the Engine that ran this work unit or viewing the entire process output from the failed work.

Property Grid lets you search for parameters by name or value

Every Property Grid control has a filter text field at the top. Typing in this field will filter the list of parameters displayed to any parameter whose name or value contains the text you have typed.

Number properties get improved UI selection or slider options

Number properties with a range get a slider, or you can assign special values with custom names, allowing users to select an option that is partially a choice and partially a number. For example, the CPUs value let's you choose special values like "one per engine" or type a custom number of cores per worker.

Info Panel filtering

Engine Failures and Engine History panels now include a filter field at the top to more easily find specific information more quickly. These use the same standard filter UI as the other filter controls in other places in the GUI.

Search and Replace fields in multiple jobs directly from the Job list

The same search and replace dialog that you can use in the Submit Job window to change look for text in every value from a job and replace that text with something else is now available for using on multiple jobs at the same time directly in the main window. Select one or more jobs and use Job > Replace in Job to access the replace window. When you click OK, every selected job will have every value searched and will replace any text found that matches the criteria with the text you supply.

Filter the Archived Jobs list

Find a deleted job more easily in a sea of jobs by searching by name or date using the same simple filter UI that is standard throughout the Smedge GUI.

More colors for items in the Engine History info panel

Orange colored events in the Engine History list indicate work that was requeued from the Engine, and Blue colored messages indicate licensing events. Engine settings changes are now colored in magenta to stand out better. Green is still used for connection and Red for disconnection.

New Parameter Commands

There are a bunch of new parameter commands to do string manipulations and file detections:

SwapExtension	Replace the extension for given parameter value
Length	String length of the current value
Empty	1 if current value is empty, 0 otherwise
Contains	1 if current value contains parameter, 0 otherwise
ContainsOneOf	1 if current value contains one of a list, 0 otherwise
ContainsOneNotOf	1 if the current value contains character besides those in the provided list, 0 otherwise
StartsWith	1 if the current value starts with parameter, 0 otherwise
EndsWith	1 if the current value ends with parameter, 0 otherwise
MatchRegex	1 if the current value matches the parameter regular expression, 0 otherwise
Left	Leftmost N characters, N supplied by parameter
LeftFirst	Leftmost characters up to the first occurrence of parameter
LeftFirstOneOf	Leftmost characters up to the first occurrence of any character in parameter list
LeftFirstNotOf	Leftmost characters up to the first occurrence of any character not in parameter list
LeftLast	Leftmost characters up to the last occurrence of parameter
LeftLastOneOf	Leftmost characters up to the last occurrence of any character in parameter list
LeftLastNotOf	Leftmost characters up to the last occurrence of any character not in parameter list
Right	Rightmost N characters, N supplied by parameter
RightFirst	Characters from the first occurrence of parameter to the end
RightFirstOneOf	Characters from the first occurrence of any character in parameter list to the end

RightFirstNotOf	Characters from the first occurrence of any character not in parameter list to the end
RightLast	Characters from the last occurrence of parameter to the end
RightLastOneOf	Characters from the last occurrence of any character in parameter list to the end
RightLastNotOf	Characters from the last occurrence of any character not in parameter list to the end
FileSize	Size on disk of file named by current value
IsDirectory	1 if the current value names an existing directory on disk, 0 otherwise

Update Fusion supported

Blackmagic Design has modified how Fusion works from the old Eyeon versions that Smedge has supported for many years. We have updated the support to work with the more modern interface of the current version, and renamed the product to the new simpler name “Fusion” (instead of “Digital Fusion” which was the full product name under Eyeon).

New Blender parameter Output for output file path

You can specify the output path for Blender jobs as the parameter “Output”. Because this parameter is a File parameter type, it is automatically translated between platforms, if you have configured path translations, allowing you to render on multiple platforms at the same time.

ConfigureMaster option to display Master Info

Get command line access to basic connection info by querying the master using the ConfigureMaster shell. This info includes the master hostname, ID, license info and administrator mode info.

JobData shell can view all parameters

Supply the special parameter name: * to list all parameters saved in a Job file on disk.

Maya product updated

It now detects the “fatal error” message and Arnold for Maya licensing failures, and the options have been cleaned up for the current version of the Arnold rendering plugin, which has added, changed, and removed some of the override options available over the last several years.

Some very old product definitions have been removed

Support for Maya versions 1-5 (before the plug-in renderer system existed), support for 3DS Max rendering using the Splutterfish command line tool (before Max supported command line rendering), Combustion, Mach Studio, and the non-functional sample file called ProductSequence have been removed to tidy things up that people don’t generally need. If you do need one of these, you can copy the PSX files from an older version of Smedge, or contact support@uberware.net.

Linux build uses GTK-3

We have updated the Linux build system to use the more modern graphical toolkit libraries available. This should improve display performance and consistency on modern versions of Linux. Please contact us if you need to support a custom Linux build with older library versions.

Master did not allocate all possible work when it was not in “pack engine” mode

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