By Karen Moltenbrey

Flame/Nuke artist-designer Mark Renton has always been a person on the go. He has made his way across the globe and back, accepting jobs that enabled him to learn and master the latest technology for 2D/3D visual effects, compositing and editorial finishing. And now, thanks to his Dell mobile workstation, he is able to ply his craft anytime, anywhere, without encountering slowdowns or other issues — redefining what it means to be flexible and versatile in terms of his personal and professional life and opportunities.

Two and a half years ago, Renton founded FIRESTORMvfx, with the goal of establishing a working facility with employees in addition to teaching — educating and passing along “workflow tips and secrets” he has learned by pushing Flame hard over the past 25 years.

Renton is also someone who likes to “break things” — software and hardware, that is — while pushing them to their limits, going beyond the typical process and procedures. As a result, he has amassed extensive industry knowledge, expertise and credits, even becoming an Autodesk Flame 2022 beta tester.

Renton has always used a desktop workstation to run Flame (which requires Linux or MacOS) — most recently on an iMac. About a year ago, though, he was given the opportunity to try using the software first on a Dell Precision 7740, then a few months later on a Dell Precision 7750, the company’s most powerful
17-inch mobile workstation with NVIDIA RTX 5000 graphics and AI, albeit with some reconfiguration to make them compatible with the most current version of CentOS.

“I played with it and thought, this is the way to go! I’m not going back to any more towers because I’m able to do everything that the Flame is capable of doing, only on a mobile platform,” says Renton.

**Learning by Doing**

Renton has been in the post industry for nearly three decades, acquiring a wide range of working knowledge pertaining to various tools, technologies and techniques. With a longtime interest in art and film, he received a diploma in visual communications from a small technical college in his home country of Australia, where he learned the fundamentals of art design, structure and color. Then he put that knowledge to use, first working in print publishing and then at a multicultural TV station in Sydney.

“I went straight from a traditional hand-designed print publication into nonlinear digital design using a Quantel Paintbox to design graphics for on-air promos,” says Renton. From there, “Most of my learning has been on the job, and I was getting paid to learn new software!”

Not long after, Renton migrated to New York and accepted a job making station IDs and doing commercial work. “Back then, no one really knew a lot about [these systems] or how to do any of this stuff. I was often winging it, too,” he adds. With a Visa deadline looming and an offer from a company back in Australia, he returned to Sydney, where he tackled a new tool, Parallax Matador (later becoming Avid Media Illusion), which ran on a small but powerful SGI Onyx.

“The software had instruction manuals, which didn’t mean a thing to me. My approach was to just figure it out on the fly and break it — I would do something that no one has done before, something that ‘breaks’ the software (or the hardware),” Renton says.

Then Renton heard of a new tool called Flame, and he was burning to try it. The opportunity arose in 1997, when he was offered a job in Singapore. He then learned Flame in two weeks before leaving Sydney. “I really threw myself into the deep end as within a week of moving to Singapore, I had clients and agencies to work with,” Renton recalls. “But because I had the knowledge from the Quantels, the Illusion, the Matador and various other platforms, I was able to apply that on the Flame — and this was when Flame was running on SGI workstations.”

Eventually, Renton made his way to Los Angeles and Asylum Visual Effects, traveling back and forth from Singapore until receiving an O-1 visa (given to those with specialized skill) in 2001. He worked there for 10 years, during which time the Onyx (and Unix) was phased out in favor of PC workstations and Linux. With that move from a refrigerator-size machine to a desktop tower came newfound speed and power.

But that was only the beginning.

**Going Mobile**

Now as FIRESTORMvfx, he needed a reliable system but wasn’t really interested in a tower or a “trash can” or any other Apple desktop machine. “I pushed it, and it would get hot; it overheated. And Flame would freak out,” he says of his iMac.

When COVID hit, his wife encouraged him to invest in a laptop that he could transport back and forth to Asia and other locales. After some research and consideration, Renton eventually moved to a MacBook Pro on which he ran Flame. “The initial setup was pretty easy, but when the workload started to come in, the Mac felt like a little four-cylinder, and I needed something a little beefier,” he says.

Mark was introduced to Matt Allard, director of strategic alliances at Dell, who offered to loan the artist a Dell Precision 7740 mobile workstation with an NVIDIA Quadro RTX 5000 GPU for an NAB Autodesk
Late last year, Allard set him up with the company’s then-latest mobile workstation, the **Precision 7750**, which ran Windows. (Editor’s note: Precision workstations can be ordered with Red Hat Linux or Ubuntu Linux.) So, the workstation was reconfigured with CentOS and then loaded the latest beta version of **Flame 2022**. “And I’ve been running sessions on this beast of a machine ever since,” says Renton.

While some people have encountered driver issues when installing CentOS on various branded laptops, Renton has not experienced any problems or slowdowns on his Precision, certified for Red Hat Enterprise Linux 8. Specifically, Renton’s Precision 7750 runs Linux x86-64. It also contains an NVIDIA Quadro RTX 5000 graphics card and an Intel Xeon W-10855M CPU (2.8GHz), along with 128GB memory.

**Putting It Through Its Paces**

Since receiving the Precision 7750 at the end of last year, Renton has put it (and the Flame software) through its paces, using it on a few commercials and two short films. “I’ve pushed it to where anything that I would have done on a tower, I can do on this laptop,” he says. “I’ve even fired up Flame in an Uber.”

Complementing the mobile workstation is a Dell UltraSharp U4021QW 40-inch curved WUHD monitor, which Renton is testing. He Thunderbolts the monitor to the Precision and says “it works great.” The editor also appreciates the machine’s multiple peripheral outputs. At this time, Renton does not have a RAID and instead uses various internal and external drives, including those from G-Tech, Glyph, Seagate and Aspera. He recently purchased some small JBL speakers, gradually setting up a “comfortable, full-on Flame suite.”

Once travel restrictions have lifted, Renton plans on heading to Asia temporarily, bringing with him the Dell Precision and his MacBook Pro, both running the latest Flame 2022 (and sometimes Blackmagic Design’s DaVinci Resolve and open-source GIMP, GNU Image Manipulation Program). “That’s all I need to work. Any 3D modeling, I just put it through the Flame. Any painting, I put it through the Flame. Any EDL, I just put it through the Flame.”

As for the Precision, “I can just close the lid and take it with me, and I fire up Flame whenever I want. And that’s what I have been doing,” Renton says.

He continues: “The Flame on the MacBook Pro was great, but with the Dell, you can feel the differences between the two, the power, and it’s a little more grounded and stable. So for the bigger jobs, I’ve been pushing them through on the Precision.”

**It’s All About the Work**

That includes spots he has done for Walmart, Lowe’s and VRBO, mainly with a variety of direct agency internal productions and post production houses. In addition, he has worked on two short horror films, where he did cleanup on 30 or so shots and used Flame 2022’s new AI Camera Analysis tracking software. He also extensively used Matchbox effects, like the Human Body Extraction and Human Face Extraction functions.

According to Renton, the Flame’s versatile conforming of ProRes4444 4K or 6K files, then working in Batch FX in the Timeline, in tandem with the Effects tools, was no challenge for Dell’s workload and throughput. Moreover, Renton also employed Flame’s new NDI (Network Device Interface) feature as a remote
broadcast monitor. “The director was blown away by the
fact that I was able to do it all on a laptop,” Renton adds.

“I’ve been very lucky to be on this piece of software that’s
paid our way and let us experience other countries,” says
Renton. “And now I am able to go back to Asia or Europe
or Australia, back to my hometown if I want, and have my
setup and work from there or anywhere without missing a
beat.”