



NEWS RELEASE

Penguin Computing™ Releases Scyld ClusterWare 11, New Architecture Allows Additional Cluster Types, Sizes, Security Options

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- The new Scyld ClusterWare 11 delivers a state-of-the-art, web-enabled HPC cluster management software system to customers in the Government, Media & Entertainment, Life Sciences, Financial Services, Energy, Manufacturing, and Oil & Gas Industries
- Paired with Penguin Computing expertise, this complete solution helps customers design, manage, optimize, and secure their unique cluster environments

DALLAS, Texas – SUPERCOMPUTING CONFERENCE 2018 – November 12, 2018 – **Penguin Computing**, a subsidiary of **SMART Global Holdings, Inc.** (NASDAQ: SGH) and leading provider of high-performance computing (HPC), artificial intelligence (AI), enterprise data center and cloud solutions, today announced **Scyld ClusterWare® 11**, a new, redesigned version of its HPC cluster management software system. Version 11 of the Scyld ClusterWare software system is a complete, out-of-the-box HPC provisioning suite that provides significant customization and security features, combined with enhanced usability and the flexibility of system image management. The new architecture for the Scyld ClusterWare 11 system is now kernel agnostic, supports SELinux, can scale to large node counts, enables customer defined node images, and offers improved monitoring tools. Combined with the expertise of Penguin Computing professional services and customer support, the Scyld ClusterWare 11 suite enables customers across a variety of vertical markets to design, manage, and secure their unique cluster environments with greater flexibility and customization than ever before. This new release also allows customers to significantly increase their cluster security. “We’re proud to introduce the ClusterWare 11 software system and support the growing worldwide HPC market with the rapid provisioning, enhanced monitoring, and increased security features that users need,” said Victor Gregorio, senior vice president of cloud services at Penguin Computing. “What’s even better for customers is that the ClusterWare 11 suite is designed to help users integrate tomorrow’s technologies into their HPC environments. In addition, since we’re in an era where system security is

paramount, we made sure that the ClusterWare 11 software allows our customers to customize and audit security policies.”

About Scyld ClusterWare 11

Along with significant customization and security feature upgrades, the Scyld ClusterWare 11 platform is fully compatible with the Red Hat® Enterprise Linux® operating system and CentOS. The Scyld ClusterWare 11 software delivers near-instant cluster provisioning and a single system image architecture that guarantees configuration consistency. Features include:

- **Web-Enabled HPC Cluster Management:** New web interfaces help customers more easily manage and visualize clusters.
- **Revamped Tools for Cluster Monitoring:** An updated set of tools helps customers monitor and visualize cluster metrics. Customers can also set alerts based on thresholds.
- **Greater Flexibility:** Now kernel agnostic, ClusterWare 11 customers can select and run their choice of kernel on Red Hat Enterprise Linux or CentOS.
- **Rapid Provisioning & Change Management:** Designed for extremely rapid provisioning, the new platform gives customers the ability to instantly update compute node farms using customizable node images.
- **Pre-bundled HPC software with Commercial Support:** Bundles of all the software necessary for HPC environments are included, such as message passing interface (MPI) implementations and schedulers.
- **Improved High Availability for Cluster Reliability:** Uses a distributed key-value store across the cluster for high availability metric collection and cluster configuration repositories.
- **Ready for 3rd-Party Applications & Compilers:** Runs open source and commercial applications for bioinformatics, computational fluid dynamics, finite element analysis (FEA), weather forecasting, chemistry, energy discovery, and physics modelling. Integrates with third-party compilers such as those from Intel and PGI.
- **Centralized Reporting and Diagnostics:** All jobs, system events, load information, and issues are reported to master nodes providing a centralized location to view and manage diagnostics.

Pricing and Availability

Existing customers will get immediate access to the new release. New customers may contact sales at sales@penguincomputing.com or **888-PENGUIN**.

About Penguin Computing

Penguin Computing, a U.S.-based global provider of high-performance computing (HPC), artificial intelligence (AI) and machine learning, and data center solutions, has been serving industry for over 20 years with more than 2,500 customers in 40 countries across eight major vertical markets. Penguin offers a comprehensive portfolio of hardware and software including solutions based on the Open Compute Project (OCP), as well as extensive services

including financing and top-rated customer support. Penguin Computing products include Linux-based servers, software, integrated turn-key clusters, enterprise-grade storage, and bare metal HPC, all available in hardware or cloud-based solutions via Penguin Computing® On-Demand™ (POD™). Penguin Computing is a subsidiary of **SMART Global Holdings, Inc.**, and the cornerstone of SMART's newest business unit, Specialty Compute & Storage Solutions (SCSS). Visit www.penguincomputing.com to learn more about the company.

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