Penguin Computing Scyld Cloud Central™

Cloud native HPC/AI for rapid deployment and scaling

Key Features

- Validated with Google Cloud Platform (GCP), Amazon Web Services (AWS), Microsoft Azure, Oracle Cloud & Penguin On-Demand (POD)
- Pre-built workflows and support for dozens of HPC &AI software applications
- Collaborative, secure access for users, scientists and administrators
- Browser-based user interface with full support for macOS, Windows and Linux desktop users (no client install needed)
- Integrated with Penguin Computing Scyld Cloud Workstation™ for high-resolution access to modeling/simulation/3D rendering applications from within the browser
- Full cloud budget management and cost control settings to eliminate cloud cost overruns

GET RUNNING IN THE CLOUD - TODAY

As artificial intelligence (AI) and machine learning (ML) have become mainstream, so has demand for running HPC and AI workloads in cloud environments. Penguin Computing Scyld Cloud Central™ is a fully managed, cloud-based, end-to-end solution for high performance computing that makes it easier and faster for end-users, developers, and data scientists to deploy pure HPC, pure AI, and converged HPC/AI workloads on high-performance clusters.

While it is built for the cloud, you can easily extend this environment to seamlessly manage workloads and data in hybrid environments that can span both on-premises and cloud-based environments – and because Scyld Cloud Central was purpose-built for HPC and AI, it provides integrated support for all the applications and tools that your users and data scientists are already leveraging. Get going today!
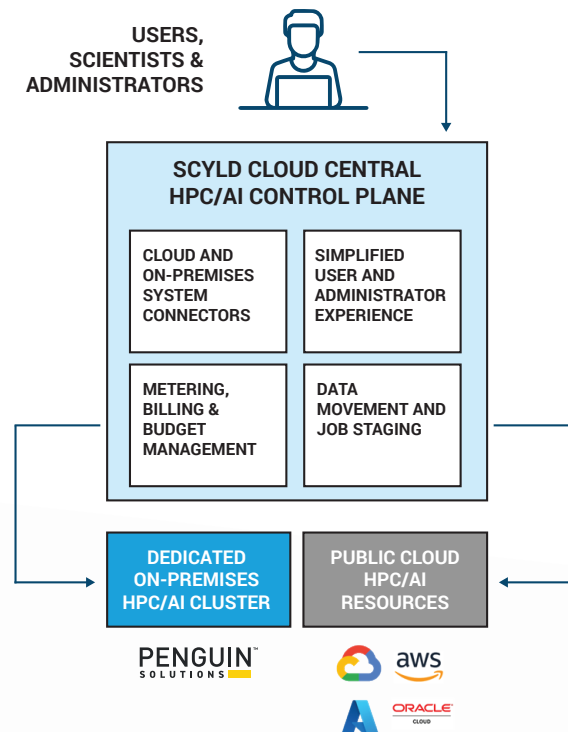
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Broad Support for Applications and HPC/AI Platforms

Scyld Cloud Central enables users to run a wide variety of modeling, simulation, and data analysis applications. Any application that can be executed on traditional HPC/AI infrastructure can be integrated and automated with Scyld Cloud Central.

From public clouds and supercomputers to in-house clusters, the platform is highly flexible and broadly compatible to meet the needs of your most demanding workloads. The platform provides full support for environments that include the latest CPU, GPU, FPGA and network fabric components – both in the cloud and within your data center.
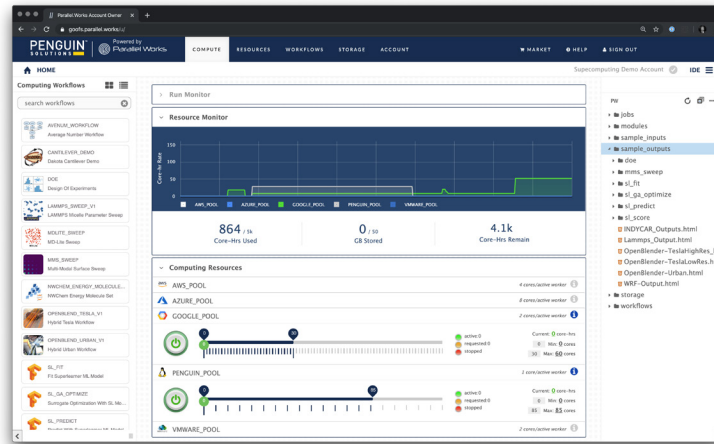
Simple Configuration of Powerful Cluster Environments

Scyld Cloud Central allows your users and scientists to execute workflows across thousands of cores using an intuitive user interface. With pre-specified inputs and outputs, the execution environment prevents errors by checking input files for data type and configurations for appropriate settings.

Control resource settings and configure new compute clusters as needed. Users can select from a range of instance types, set the maximum number of workers in a pool, and adjust settings to automatically spin up and shut down pools.
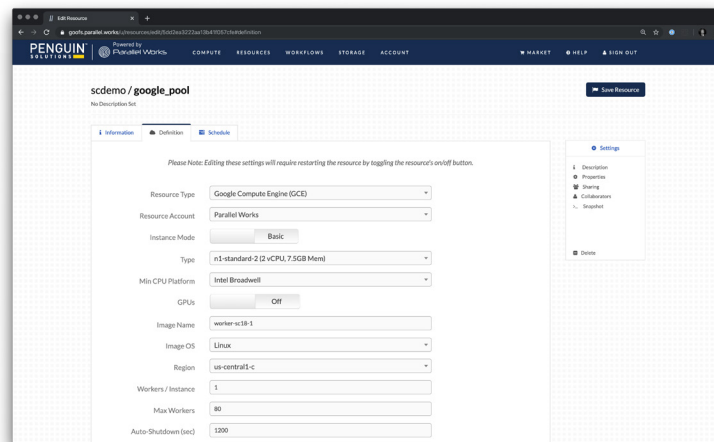
Validated for HPC/AI Deployments on Major Cloud Platforms

Scyld Cloud Central was designed to deliver mission-critical, core HPC and AI solutions in the cloud. The solution, combined with expert services from Penguin Computing, accelerates your ability to rapidly provision compute and storage resources using an infrastructure-as-code model that empowers your users, data scientists and administrators to be the innovation engine for your organization.

Our platform is validated and supported for operation with major cloud environments – and with industry dominant workload scheduling and data storage systems – to provide your users with maximum flexibility and choice.

Integrated Web-based Data and Application Visualization

Traditional HPC and AI/ML environments require users to download large data files to on-premises workstations for pre/post processing, model development, and data analysis offline from the computing resource and centralized storage. This is a time-consuming process that makes it hard to create an efficient workflow with predictable time to results.

Scyld Cloud Workstation – an integrated companion product to Scyld Cloud Central – provides users with high fidelity, workstation- grade access to their visualization applications directly within the browser. No data movement is required – and user productivity soars.
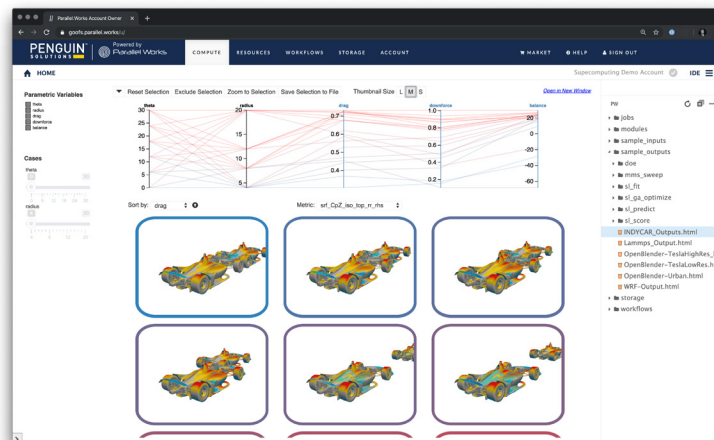
Extensive Suite of Pre-Integrated Software Tools & Applications

High Performance Computing and AI users rely on a broad array of applications and libraries to accelerate their work in analyzing data and simulating complex processes.

Scyld Cloud Central includes a marketplace that allows for the easy integration of dozens of popular tools for use cases such as CAE/CFD, weather modeling and mathematical analysis. For AI, point-and-click enablement of tools such as PyTorch and TensorFlow allow your users to drive powerful workflows in minutes.
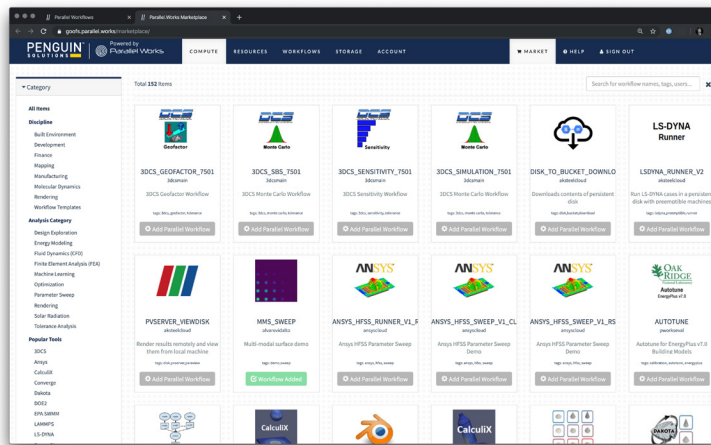
Get Started Today with a Trial Configuration

Connect with Penguin Solutions to engage in a cloud HPC transformation discussion – and to arrange for a trial environment that will enable your users and administrators to experience the Scyld Cloud Central platform. You're closer than you think to scaling and bursting workloads to the cloud – and Penguin is your partner to getting up and running.

Learn More

If you would like more information or a live demonstration please contact Penguin at sales@penguincomputing.com or visit www.penguincomputing.com/cloud-central

ABOUT PENGUIN SOLUTIONS

An **SGH**™ Brand

Penguin Solutions accelerates digital transformation with the power of emerging technologies in HPC, AI, and IoT with solutions and services that span the continuum of edge, core, and cloud.

Penguin Computing specializes in innovative and emerging technologies for the world's most demanding workloads.

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