

# Services

Making the most of your Penguin Computing solutions...



#### Services-at-a-Glance

Penguin Computing solutions are comprehensive, end-to-end solutions that you can leverage to jump-start your technical compute initiatives. In some cases, the solution will directly meet your needs right out of the box. However, most often there will be additional design, deployment, integration, and hosting considerations that need to be addressed.

#### **Professional Services**

 Expert configuration and deployment services to ensure you are able to use your new Penguin Computing solution right away.

#### **Managed Services**

 Proactive IT services subscription to augment your team and keep your compute environment up and running at peak performance.

#### **Data Center Services**

 Data center services to give you the best design, deployment, and experience in cloud, hybrid-cloud, and fully-managed hosting.

#### **Design Services**

 Experienced solution architects assist you in harnessing the power of rapidly changing complex technologies.

#### **Project Management Services**

• Expert project coordination and oversight to ensure successful engagement and an unprecedented customer experience.

# **Service Offerings**

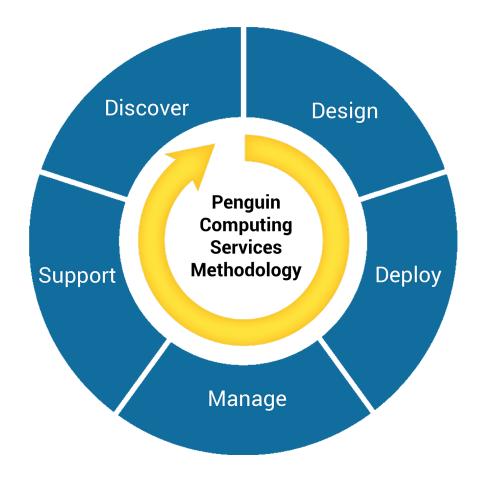
Penguin Computing is an industry leader in the design, deployment, and support of open technologies in diverse environments and across market verticals.

Penguin Computing has the depth and breadth of experience and expertise, gained by over two decades of serving our customers, to provide agile services that keep organizations and compute environments of all sizes running smoothly throughout the life of the environment.

From project discovery to ongoing maintenance to future planning, Penguin Computing takes a holistic and agile approach to customer service. Our services form an integral pathway to achieving our customers' success quickly, effectively, and efficiently. We are your trusted advisor, able to help you gain access to powerful technologies and solve your technical challenges.

We support a wide range of hardware and software. We have long been committed to open technologies. We have strong relationships with both open source and proprietary vendors, enabling us to develop solutions that fit your needs and exceed your expectations. We partner with the industry's leading hardware and software vendors, including AMD, Intel, NVIDIA, Red Hat, ThinkParQ, Vcinity, and WekaIO.

Delivering agile services for organizations and compute environments of all sizes.



Our mission is to help you stay agile with out-of-the-box solutions and expert services. Whether you need help in planning an entirely new project from beginning to end, or you simply need to augment your existing staff to meet a specific need, our services team is ready to implement and support the solution that fits your needs and budget. Designing the right Al-empowered HPC platform for your workloads is a complex task.

Ensuring that the compute, storage, and networking subsystems are well designed individually and function in a balanced manner together is critical. With each new technological advance comes more choices. A poor design choice at any point in the process can negatively impact performance and reliability and can significantly reduce the value of your HPC investment.

Penguin Computing services include:

- Professional Services
- Managed Services
- Data Center Services
- Design Services
- Project Management Services



# **Expertise Challenges**

Advanced and emerging technologies are often complex and difficult to configure, and require special care to deploy. Lack of familiarity can quickly escalate into delays and cost overruns, which can be devastating to budgets and project deadlines.

#### **Professional Services Solutions**

Penguin Computing Professional Services delivers expert configuration and deployment services, ensuring you are able to make immediate use of your new solution. Our engineers are trained and certified in the latest technologies with years of experience in data center infrastructure, high-performance computing, data storage, networking, and much more.

Penguin Computing delivers agile professional services to ensure that you are up and running quickly and successfully. Our clients leverage our expertise to ensure their new technology is implemented and deployed correctly. From small clusters to the world's largest supercomputers, our certified engineers ensure you are successful.

We are focused on solving your greatest challenges and delivering an exceptional experience.

#### **Professional Services Features**

- Experienced and certified engineers
- Broad and deep expertise
- Comprehensive services portfolio
- Adaptable to meet your needs

#### **Professional Services Benefits**

- Quickly move to production
- Access emerging & innovative technologies
- Reduce risk
- Ensure maximum performance and stability

# **Key Professional Services**



#### Integration

Quality in-factory and on-site node and rack-level integration and testing



#### Stand-up

On-site delivery, verification, and orientation



#### **HPC**

High-Performance
Computing
cluster installation and
configuration



#### **Storage**

Storage appliance integration, storage server set-up, and software-defined storage configuration



#### **Networking**

Network implementation and switch configuration



#### **Application**

User application installation and configuration



#### **Training**

Orientation, as-built knowledge transfer, and product training



# Engineering

Consultation, benchmarking, tuning, and special services



# **Cluster Management Challenges**

Managing HPC clusters, storage systems, private clouds, or other complex, Linux-based environments can quickly consume IT budgets. System management and maintenance costs are increasing constantly and are often impossible to predict. An urgent need for contract or in-house services can put strain on any budget. As organizations repatriate services from cloud to a more balanced, hybrid cloud approach, often requiring new and unfamiliar technologies, the strain to deploy, manage, and integrate in-house resources with private or public cloud resources presents a major challenge.

#### **Managed Services Solutions**

Penguin Computing Managed Services is a proactive IT service designed to keep you up and running at peak production. We have decades of experience supporting clients across diverse market verticals, helping them manage their technology challenges through expert systems administration, consulting, and support services. We help organizations of all sizes to reduce overhead and boost productivity at a fixed annual cost.

#### **Managed Services Features**

- Experienced IT services
- Access to broad and deep expertise
- Predictable, annual subscriptions and fixed rates
- Adaptable to meet your needs

# **Managed Services Benefits**

- Leverage emerging technologies
- Reduce capital expenses and experience predictable operating costs
- Enhance security and reliability of your IT infrastructure
- Ensure maximum performance and stability of HPC clusters and mission-critical systems
- Get the most out of your hybrid-cloud strategy

# **Key Managed Services**



# Leverage Emerging Technologies

Quickly leverage powerful emerging technologies to advance their competitiveness



#### Augment In-House IT

Augment in-house IT capabilities can benefit from tapping into our expertise



# Maximize Your Hybrid Cloud Strategy

Manage costs while quickly scaling to meet your business needs

### **Our Managed Services are a great fit for:**



#### **Small Teams**

Small research teams
who may be too
inexperienced or small
to support their
technology systems



## Medium-Sized Organizations

Medium-sized organizations striving to balance growth with cost, particularly as they repatriate systems and services from earlier public cloud experiments



# **Large Organizations**

Large organizations
with high compute
workloads and data
volumes who are using
HPC and AI to drive
ambitious business
goals



### **Data Center Challenges**

Organizations face many challenges when implementing a coherent data center strategy, and modern computing workloads can put a strain on data center infrastructure. Whether planning and implementing in-house data centers to adopt new technologies, expanding to co-location facilities, or just growing the organization's geographic footprint, it is vitally important to understand current and future requirements, limitations, and costs. With unexpected costs, security compromises, and data locality difficulties, the public cloud may not be the right fit for you. This is why many organizations have been rethinking their infrastructure strategies, often shifting back to in-house or to a hybrid cloud model.

#### **Data Center Solutions**

Penguin Computing can help alleviate the data center and hosting challenges organizations face as they try to support modern workloads. We have been designing and deploying to data centers since our inception. We bring this depth and breadth of experience to every engagement.

# **Managed Services Features**

- Expert, consultative designs
- Broad and deep expertise
- Comprehensive options
- Adaptable to meet your needs

# **Managed Services Benefits**

- Reduce risk
- Expand geographic reach
- Move applications and content closer to the edge
- Improve data center quality of service
- Improve prevention strategies
- Ensure your hosted or hybrid IT environment is safe and secure
- Maintain regulatory compliance

# **Key Data Center Services**



# **Design Consulting**

Leverage our expertise to design the ideal data center, hosted, or hybrid experience.



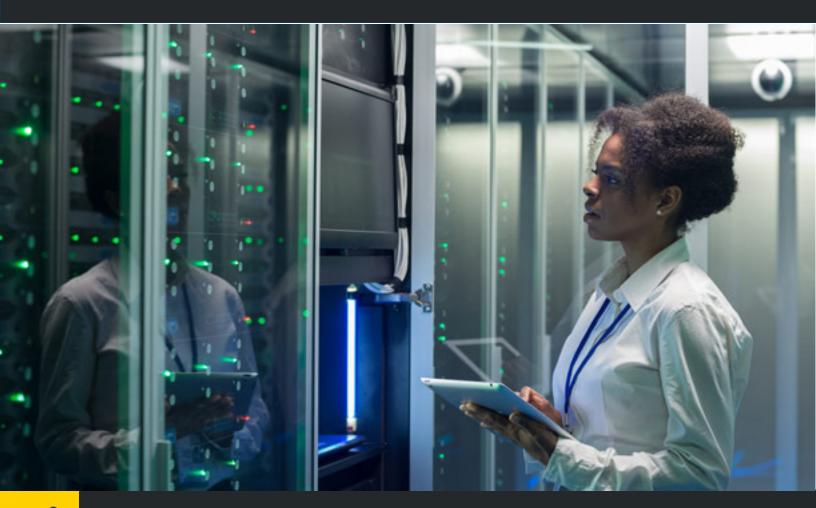
#### Hosting

Leverage our strong partnerships with world-class data centers to deliver a wide-variety of solid co-location hosting options.



# **Fully-Managed Hosting**

Combine our Hosting and Managed Services for the complete "As-A-Service" solution.





#### **Compute Platform Challenges**

Today's IT technology landscape is more fluid than ever before. The proliferation of software-defined technologies places new design, integration, and support burdens on already strapped IT teams. The ever-changing diversity of compute platforms has increased the pressure on IT teams to keep pace with these technologies in order to best fulfill end user needs. Selecting the right technology design partner is critical to unlocking the promise of these game-changing technologies.

### **Design Solutions**

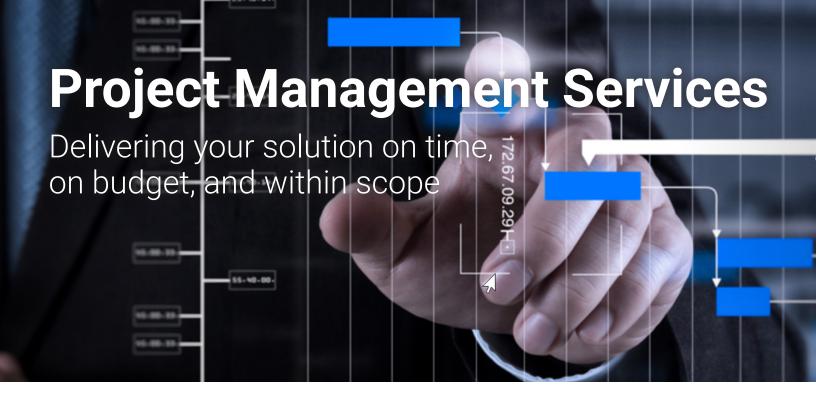
Penguin Computing provides agile Design Services that help our customers solve their greatest technical challenges. For decades, we have been delivering and deploying innovative, open technologies in the most technically challenging environments. Our collaborative approach focuses on the customers' performance and budgetary needs. Engage Penguin Computing's team of experienced solution architects today to assist you in harnessing the power of rapidly changing complex technologies.

# **Design Services Features**

- Broad and deep technical expertise
- Rack and floor space design
- Environment scalability
- Maximum power consumption
- Power phase balance
- · Efficient heat removal
- Optimal networking topologies

# **Design Services Benefits**

- Accelerate adoption of key emerging technologies
- Achieve greatest return on investment with efficient designs
- Economically augment existing staff skill sets
- Gain a single point of engagement for complete, balanced systems
- Pair with Professional and Managed Services for comprehensive lifecycle engagement



#### **IT Project Challenges**

Downward budgetary pressures. Scope creep. Shifting priorities. Multiple third party vendors. Complex software stacks. Competition for resources. Competing stakeholder expectations. Inconsistent communication and accountability across the project lifecycle. If any of these sound familiar, Penguin Computing's Project Management services should be part of your solution.

#### **Project Management Solutions**

Our professionally certified project managers work with you and your team to plan, execute, and deliver your Penguin-designed business and technology solution. Supported by a centralized Project Management Office (PMO), we provide the methodology, tools, and resources to match the specific needs of your project.

#### **Project Management Features**

- Clearly defined scope and change control processes
- Communication plans that meet the needs of all stakeholders
- Risk identification and mitigation strategies
- Experience and certifications in both traditional and Agile methodologies

# **Project Management Benefits**

- Visibility across the entire project lifecycle
- Significant improvement in schedule, budget, and quality metrics
- Higher stakeholder satisfaction

# **Summary**

Penguin Computing solutions are comprehensive, end-to-end solutions that organizations can leverage to jump-start their technical compute initiatives. In some cases, the solution will directly meet the needs of the organization, right out of the box. However, most often there will be additional design, deployment, integration, and hosting considerations that need to be addressed.

#### **Design Services**

#### **Workflow Design**

- Software Orchestration
- Compute Performance
- Multi-Node Communication
- Data Storage and Data Tiering
- Data Ingest and Egest
- Environment Sizing

#### **Data Center Services**

#### **Data Center Design**

- Rack and Floor Space
- Environment Scalability
- Maximum Power Consumption
- Power Phase Balance
- Efficient Cooling and Heat Removal
- Optimal Networking Topologies

#### **Professional Services**

#### Stand Up and Initialization

- System Burn-In Testing
- Racking and Cabling
- Software Installation & Tuning
- On-Site Deployment and Integration

### **Hosting Services**

#### **Data Center Hosting**

- Penguin Data Center
- Customer Data Center
- Power, Space, and Cooling Management
- Monthly or Annual Billing (As-A-Service)

#### **Managed Services**

#### **System Administration:**

- Complete Hands-Off Experience
- Augment Existing IT Capabilities
- Collaborate with Penguin Support
- Tens to Thousands of Servers
- · Terabytes to Exabytes of Data
- Multi Data Center Support

# **Contact Us**

Use this **form** or call Penguin Computing today at 1-888-736-4846 to find out how you can make the most of your Penguin Computing solutions.



Expanding the world's vision of what is possible