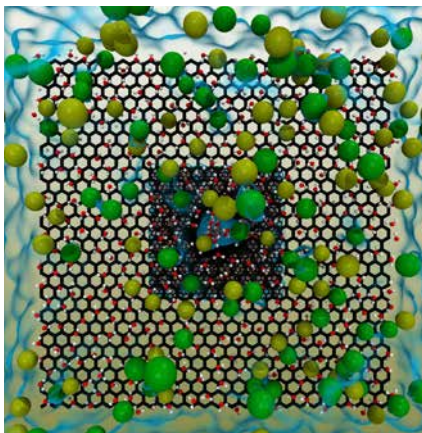# ARCHIE-WeSt

**Academic and Research Computer
Hosting Industry and Enterprise**
in the West of Scotland

ARCHIE-WeSt

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Hosting Industry and Enterprise**
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We are a supercomputer centre for the West of Scotland based at the University of Strathclyde and dedicated to wealth creation and research excellence. Funded by EPSRC, we operate in partnership with the Universities of Glasgow, Glasgow Caledonian, West of Scotland and Stirling.

ARCHIE-WeSt can enable you to:

- Tackle problems beyond the scope of your desktop or workstation
- Run many calculations at once
- Reduce time to solution
- Increase your productivity
- Enhance your competitive advantage

Our Team

- Experienced HPC Manager and technical System Administrator
- Dedicated User Support Officer
- Academic Director and Operational Director
- Advisory Board includes Industrialists and partner Universities

We are committed to supporting Industry to exploit High Performance Computing, helping to deliver projects efficiently and effectively.

Our Service Includes

- High performance computing resources at a highly competitive price
- 500 free introductory compute hours for feasibility studies
- Introductory training and assistance at our scheduled courses to help you get up and running at no extra charge
- Priority service for commercial customers to ensure rapid turnaround

Advanced bespoke training
(at an additional cost)*

Including, but not limited to:
- Advanced HPC methods
- Molecular Modelling & Chemo/Bio Informatics
- Computational Fluid Dynamics
- Finite Element Modelling

*Advanced training courses start from £1500 ex-VAT per day for up to 5 people, plus £250 per head thereafter.

High Performance Computer Specification

ARCHIE-WeSt is a state-of-the-art water cooled 38 Teraflop High Performance Computing (HPC) Facility located at the University of Strathclyde.

Technical specification:

Standard Nodes:	3408 2.66GHz Intel Xeon X5650 cores (Westmere) 48GB RAM (4GB per core)
Large Memory Nodes:	Eight 512GB RAM nodes 2 Intel Xeon E7-4830 2.13GHz CPU's
GPU nodes:	Eight Standard Nodes each with Nvidia Tesla M2075 GPU cards (448 cores, 6GB RAM)
Visualisation Nodes:	Two Dell R5500 servers with Nvidia Quadro 6000 graphics. 2 Xeon X5650 CPU's, 48GB RAM.
Network: Storage:	QDR Infiniband 40Gb/s networking throughout the whole cluster 150TB of high performance LUSTRE parallel storage, capable of 3.5Gb/s data transfer.

- ARCHIE-WeSt uses the Linux operating system but can also offer Windows instances where required
- Access ARCHIE-WeSt **directly from your desktop** using Remote Desktop software

Current Application areas

- Finite element analysis
- Computational fluid dynamics
- Health technologies and life sciences
- Big data analytics
- Renewable energy
- Digital rendering
- Materials science
- Photonics and plasma physics

Software

We promote the use of OpenSource software where possible, such as OpenFOAM (computational fluid dynamics), GROMACS, NAMD and VMD (molecular dynamics), but we also provide access to commercial software* such as Ansys (finite element/computational fluid dynamics), Abaqus (finite element), Matlab and COMSOL (multiphysics software)

*Licensing terms and additional costs may apply
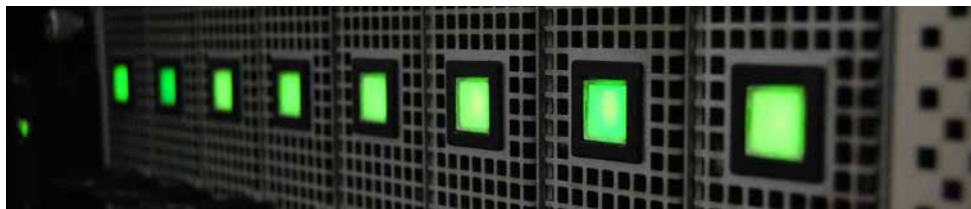
Fees

ARCHIE-WeSt is a non-profit making facility focussed on supporting Research and Enterprise in the West of Scotland.

Our entry level price is £0.10 per standard core hour

- Our standard core hour is 1 hour of a 2.66GHz Intel Xeon X5650
- Large volumes can be purchased at a discounted rate
- Our price includes basic support to get you up and running
- We can provide advanced training (at an additional cost).

Other service components

- Large memory nodes (512GB RAM) £0.15 per core-hour
- GPU enabled node £1.20 per node hour

Prices exclude VAT.

For more information please contact:

Dr Richard Martin
High Performance Computing Manager
University of Strathclyde
Tel: +44 (0)141 548 3265

contact@archie-west.ac.uk
www.archie-west.ac.uk