	No: **OSC-11**
Ohio Supercomputer Center User and Account Management	**Effective:** **06/04/2009**
	Issued By: Kevin Wohlever Director of Supercomputer Operations **Published By:** Ohio Supercomputer Center **Original Publication Date:** TBD

1.0   Purpose

This policy establishes the information and qualifications required to establish an account to use OSC resources. This policy will also define the basic levels of support that users of OSC IT environments can expect.

2.0   Scope

Pursuant to Ohio IT Policy ITP-A.1, "Authority of the State Chief Information Officer to Establish Policy Regarding the Acquisition and Use of Computer and Telecommunications Products and Services," this policy applies to all systems under the control of the Ohio Supercomputer Center.

The scope of this information technology policy includes OSC computer and telecommunications systems and the employees, contractors, temporary personnel and other agents of the state who use and administer such systems.

3.0   Background

OSC provides an IT environment that is supported primarily through state funds in support of research. As such, the IT resources are provided and restricted to authorized researchers and research projects.   In addition, users of state and university supported IT services must follow state and university policies, standards and procedures. This policy is set forth to define the OSC specific user management policies and associated procedures.

4.0   References

4.1   Ohio IT Policy ITP-A.1, "Authority of the State Chief Information Officer to Establish Policy Regarding the Acquisition and Use of Computer and Telecommunications Products and Services," defines the authority of the state chief information officer to establish State of Ohio IT policies as they relate to state agencies' acquisition and use of information technology, including, but not limited to, hardware, software, technology services and security.

4.2   OSC IT Policy, OSC-3, "Information Security Framework," is the overarching umbrella security policy for OSC information and services. OSC IT Policy OSC-11 "User Management," is one of several sub-policies. These security policies should be considered collectively rather than as separate or unrelated policies.

4.3   OSC IT Policy, OSC-5, "Remote Access Security," requires OSC to have a policy for remote access to OSC systems.

4.4   OSC IT Policy OSC-6, "Security Education and Awareness," requires OSC to provide information technology security education and awareness to employees and other agents of the university.

4.5   OSC IT Policy, OSC-8, "Password PIN Security", established minimum requirements for password management.

4.6   A glossary of terms found in this policy is located in section 9.0 - Definitions. The first occurrence of a defined term is in ***bold italics***.

5.0   Policy

5.1   Non-commercial Accounts

5.1.1   <u>Who can get Accounts?</u> A Principal Investigator must have a full-time appointment (typically a tenured or tenure-track faculty appointment) or a research scientist at a college, university or research organization administered by an Ohio academic institution.

Students, post docs, visiting scientists and other collaborators may be authorized users on a project headed by an eligible PI.

5.1.2   <u>Charges for Accounts.</u> Approved, non-commercial accounts, which include all academic research account or accounts for not-for-profit research organizations will not be charged for their use of OSC IT resources.

5.1.3   <u>Types of Accounts.</u> Accounts will be assigned on a per project basis. A "new" account will provide minimum level of resources to allow fast startup of research. During its initial stage, a review team will review the project the account will be used for, and recommend if the account should authorized for future resources by making the account a "standard" project account.

Accounts related to teaching high performance computing programming or techniques can be made available as "classroom" accounts. Classroom accounts require pre-authorization by OSC and are not provided initial resources.

Additional levels of standard accounts may be created and defined in OSC account management procedures.

5.1.4 Account Restrictions. Non-commercial accounts may not be used as a substitute for direct commercial or industry support. OSC will perform periodic reviews of account usage to ensure accounts comply with appropriate policy on account, software, hardware and storage use.

Accounts that are using OSC resources as matching funds for grants must use only the assigned project accounts related to the grant to access OSC resources. It is responsibility of the PI(s) to ensure the appropriate account use.

Accounts are not to be shared. There is to be one user per account.

5.1.5 Account Resource Units.

5.1.5.1 Projects will be allocated a number of resource units or RUs. An 1 RU is equal to 10 hours of CPU Wall Clock Time. OSC will track and report usage of RUs on all IT resources that a user accesses.

5.1.5.2 RUs used will be deducted from the project account balance daily.

5.1.5.3 Projects and accounts that have a negative RU balance will be suspended. The account suspension can be lifted if a request for additional resources is in process but not yet approved.

5.1.5.4 OSC reserves the right to expire resources that have not been used in 18 months.

5.1.6 Account Lifetime

5.1.6.1 An account will be deleted when a project is complete

5.1.6.2 An account will be deleted when the researcher associated with the account is no longer working on the project. It is the responsibility of the PI to notify OSC to delete the account.

5.1.6.3 Project accounts that have not been used in 18 months will be removed.

5.2 Commercial Accounts

5.2.1 Who can get Accounts? Businesses can apply for accounts to undertake their computational tasks on OSC machines. Their access is subject to the restrictions associated with U.S. export controls on computer hardware and software. Their use is generally not free and is negotiated to recover the costs of computer use, staff consulting, and other OSC resources.

5.2.2 <u>Charges for Accounts.</u> Charges for businesses are negotiated as part of a contract. Charges are based on current market conditions as well as the recovery of costs for the use of OSC computational resources and staff consulting time. Charges may be waived for initial testing of codes and analyses prior to undertaking production runs. Licenses to commercial software must be obtained by the businesses or OSC as appropriate. Any costs for those licenses on the part of OSC will be recovered as part of the contract.

5.2.3 <u>Types of Accounts.</u> Accounts will be assigned on a per project basis with resources allocated in compliance with the contract.

5.2.4 <u>Account Restrictions.</u> Accounts are not to be shared. There should be only one user per account.

5.2.5 <u>Account Resource Units / Charges</u>. Accounts for business use will be tracked in the same way as non-commercial accounts. Usage will be allowed up to the maximum limits set in the contract.

5.2.6 <u>Account Lifetime</u>

5.2.6.1 An account will be deleted when a project is complete

5.3 Security

5.3.1 A password will be associated with each user account. All user passwords must follow the policy for password and pin security as outlined in OSC IT Policy, OSC-8, "Password PIN Security"

5.3.2 Access to OSC systems must be done with a encrypted protocol.

5.3.3 OSC systems are to be used for computational research. Systems use is monitored to check for unauthorized or illegal use. Accounts will be disabled if such usage is detected or suspected.

5.4 Privacy – Users of OSC systems can expect basic usage privacy while using OSC systems. OSC reserves the right to monitor for illegal or unauthorized use of the system.

5.5 E-mail

5.5.1 Outgoing e-mail will be supported from OSC systems.

5.5.2 Incoming e-mail for OSC user accounts will not be supported. The use of a ".forward" file to push user e-mail to another system will be supported.

5.5.3 The account in the .forward file must match the e-mail account provided for the user account in the OSC user database.

5.5.4   An invalid e-mail address will be cause to disable the user OSC account until a valid e-mail account is provided.

5.6   Inappropriate system use

5.6.1   No individual may use OSC resources for commercial or profit-making purposes or other purposes that interfere with the mission of the OSC or the University. As with all University computing and network facilities, OSC may not be used for improper or illegal purposes, such as unauthorized use of licensed software, intentional efforts to breach security, or the transmission of computer viruses.

5.6.2   Inappropriate systems use will result in the revocation of access to OSC Resources and suspension of all associated accounts and projects.

5.6.3   Misuse of an OSC computing systems is sometimes illegal, often unethical, and always reflects poor judgment or lack of care in following security rules and regulations. Misuse may, unintentionally, create security vulnerabilities or cause damage to important information.

5.6.4   A pattern of inability or unwillingness to follow rules for the operation of computer systems raises serious concerns about an individual's reliability and trustworthiness.

5.6.5   The following activities are considered to be misuse of OSC equipment:

5.6.5.1 The creation, download, viewing, storage, copying, or transmission of sexually explicit or sexually oriented materials.

5.6.5.2 Annoying or harassing another individual.

5.6.5.3 Using the computer for commercial purposes or in support of "for-profit" activities or in support of other outside employment, business activity (e.g., consulting for pay, sales or administration of business transactions, sale of goods or services), or gambling.

5.6.5.4 The creation, copying, transmission, or retransmission of chain letters or other unauthorized mass mailings.

5.6.5.5 Any activities that are illegal, inappropriate, or offensive to fellow employees or the public. Such activities include hate speech or material that ridicules others on the basis of race, creed, religion, color, sex, disability, national origin, or sexual orientation.

5.6.5.6 Any personal use that could cause congestion, delay, or disruption of service to any OSC equipment.

5.6.5.7 The unauthorized acquisition, use, reproduction, transmission, or distribution of any controlled information. This includes

copyrighted computer software; other copyrighted or trademarked material or material with intellectual property rights (beyond fair use); privacy information; and proprietary data or export-controlled data or software.

5.7   Storage use

5.7.1   Home Filesystems

5.7.1.1 OSC will provide each user account a permanent, limited file area known as their home filesystem.

5.7.1.2 On all of the OSC machines users have access the same home filesystem that is mounted from the OSC Mass Storage System. Your home area is the same whenever you login to any OSC system.

5.7.1.3 Files in home directories will be backed up in accordance with the OSC IT Policy, OSC-1, "Date Lifecycle Management".

5.7.2   Temporary Filesystems

5.7.2.1 In addition to the home filesystem areas, each system has a temporary area known as /tmp. This is typically a very large area where users may execute codes that produce large files.

5.7.2.2 On the cluster systems, /tmp is not shared between nodes.

5.7.2.3 Files in /tmp not last accessed more than 24 hours previously will be removed.

5.7.2.4 Files or data on /tmp will not be backed up

5.7.2.5 Security to files located in /tmp is maintained by the user. OSC provides the TMPDIR environment variable which is automatically assigned a unique directory name for the duration of an interactive or batch session.

5.7.3   Other Filesystems for projects and special use can be created and supported by various system service levels.

5.8   User Support - The Ohio Supercomputer Center will provide technical support and consulting services for OSC's high performance computing resources.

6.0   Procedures

6.1   Receiving Letters of Support

OSC has a standard letter of support that you can include (electronically or in hard copy) with a proposal for outside funding. This letter does not replace the application process for time on OSC's systems. To receive the letter of support please send your request to account@osc.edu. You should provide the following information: name and address of the person/organization to whom the letter should be addressed; name(s) of the principal investigator(s) and the institution(s); title of the proposal; number of years of proposed account; number of RUs requested per year.

The letter includes the rates associated for specified system(s). Hardware information about the systems is available at http://www.osc.edu/supercomputing/hardware.

6.2 How do I acknowledge OSC in my publications?

An acknowledgment of support from the Ohio Supercomputer Center should appear in a publication of any material, whether copyrighted or not, based on or developed with OSC-supported computing resources.

"This work was supported in part by an allocation of computing time from the Ohio Supercomputer Center."

7.0 Accessing OSC Systems

7.1 SSH - Secure Shell (SSH) is the recommended program to log onto OSC systems from another computer over a network, to execute commands in a remote machine, and to move files from one machine to another. It provides strong authentication and secure communications over insecure channels. SSH provides secure X connections and secure forwarding of arbitrary TCP connections.

7.2 Since FTP is no longer supported at OSC, you must use a utility that uses the SSH protocol. Current options include Secure CoPy 'scp' and SSH File Transfer Protocol 'sftp'. These utilities should be provided on most linux/unix platforms.

For Windows users, a popular version of scp and SFTP exists called WinSCP. This open source application can be obtained at no charge from: http://winscp.sourceforge.net/eng

8.0 E-mail

8.1 As part of the user services DB, email contact information is maintained for all users. The value for the user email address isused initially when creating the user account on the systems in the LDAP directory. Email delivery from the HPC systems to OSC users relies on the email value in LDAP to deliver email.

8.2 Email sent to OSC HPC user accounts from external systems will bounce.

8.3 Email generated on OSC systems will be sent to the email address with no email

stored locally.

8.4   Users are provided a web interface to update their email address. When a user updates their email address notifications are sent to the PI of the project, and to the grants coordinator. This allows for review of the changes. If an email address is found to be invalid attempts will be made to contact the user to update their contact information. If this is not successful the account will be disabled until a valid email address for the user is provided.

9.0   Implementation

This policy is effective immediately.

10.0   Revision History

Date	Description of Change
6/1/2009	Original policy.

11.0   Definitions

12.0   Related Resources

13.0   Inquiries

Direct inquiries about this policy to:

Director of Supercomputer Operations
1224 Kinnear Rd.
Columbus, OH 43212

Telephone: 614-292-9248

OSC IT Policies can be found on the Internet at: www.osc.edu/policies