## <u>General Password Guidelines – Last Amended September 2016</u>

## General

- 1. Except where technically not possible, all passwords should meet the following minimum standards
  - o be at least eight alphanumeric characters long.
  - contain digits or punctuation characters as well as letters (e.g., 0-9, +?.\*^\\$ () [
    ] { } /~!\@ # & =, -) NOTE: other special characters cannot be used in passwords for most Rhodes systems.
  - o contain both upper and lower case characters (e.g., a-z, A-Z).
  - o not be a word in any dictionary, language, slang, dialect, jargon, etc.
  - o not be solely based on easily guessed personal information, birthdays, names of family members, pets, etc.
- 2. To help prevent identity theft, personal or fiscally useful information such as identity or credit card numbers should never be used as a user ID or a password.
- 3. All passwords are to be treated as sensitive information and should therefore never be written down or stored on-line unless adequately secured. NOTE: Do not use the password storage feature offered on Windows or other operating systems or web browsers unless encrypted with a master password. These features can create a password file that is vulnerable to hackers.
- 4. Suitable encrypted password stores such as Password Safe are strongly recommended. If you are unsure please contact <a href="mailto:support@ru.ac.za">support@ru.ac.za</a> for advice.
- 5. Passwords together with user login details should not be inserted into email messages or other forms of electronic communication.
- 6. Never reveal your password to a Support consultant. You should always type in the password yourself.
- 7. Passwords that could be used to access sensitive information should be encrypted in transit.
- 8. The same password should not be used for access needs external to Rhodes (e.g., online banking, benefits, etc.).
- 9. It is recommended that passwords be changed at least every six months. This may be enforced on some systems.
- 10. When a forced password change occurs, previous passwords should not be reused. This may be enforced on some systems.
- 11. Individual passwords should not be shared with anyone, including administrative assistants or IT administrators. Shared passwords used to protect network devices, shared folders or files require a designated individual to be responsible for the maintenance of those passwords, and that person will ensure that only appropriately authorized employees have access to the passwords.
- 12. If a password is suspected to have been compromised, it should be changed immediately.
- 13. Password cracking or guessing may be performed on a periodic or random basis by systems administration staff in the Information & Technology Services Division or its delegates with the cooperation and support from the appropriate system administrator. If a password is guessed or cracked during one of these scans, the password owner will be required to change it immediately.

- 14. Don't use your first name, last name, pet's name, childrens' names as passwords. All known words including TV show names and dictionary words in any language are hackable.
- 15. Don't use all the same letters or numbers in the password.
- 16. If you have logged in from an open unprotected network somewhere else, you should change your password.
- 17. Don't use your login name or the same in any reversible form as a password.
- 18. As good practice, if you are issued with a password and have not typed in the selected password yourself, you should change the password you are issued with as soon as you receive it.
- 19. Don't leave your session logged in. Log out or lock your screen with a password when you leave your station.

## **Desktop administrator passwords**

In addition to the general password guidelines listed above, the following apply to desktop administrator passwords, except where technically and/or administratively infeasible:

- 20. These passwords should be changed at least every six months.
- 21. Where technically and administratively feasible, attempts to guess a password should be automatically limited to ten incorrect guesses. Access should then be locked for a minimum of ten minutes, unless a local system administrator intercedes.
- 22. Failed attempts should be logged, unless such action results in the display of a failed password. It is recommended that these logs be retained for a minimum of 30 days. Administrators should regularly inspect these logs for any irregularities or compromises.

## Server administrator passwords

In addition to the general password standards listed above, the following apply to server administrator passwords, except where technically and/or administratively infeasible:

- 23. Passwords for servers must be changed as personnel changes occur.
- 24. If an account or password is suspected to have been compromised, the incident must be reported to the Lead Systems Administrator via support@ru.ac.za and potentially affected passwords must be changed immediately.
- 25. Where technically or administratively feasible, attempts to guess a password should be limited to three incorrect guesses. Access should then be locked for a minimum of ten minutes, unless a local system administrator intercedes.
- 26. It is desirable that the built-in super user ("administrator" or "root") password for a system be an automatically generated random password. For business continuity reasons, it should be stored in an acceptable enterprise password vault.
- 27. Uniform responses should be provided for failed attempts, producing simple error messages such as "Access denied". A standard response minimizes clues that could result from hacker attacks.
- 28. Failed attempts should be logged, unless such action results in the display of the failed password. It is recommended that these logs be retained for a minimum of 30 days.

Administrators should regularly inspect these logs and any irregularities such as suspected attacks should be reported to the Information & Technology Services Division.