



DELAWARE STATE-WIDE INFORMATION TECHNOLOGY AND ARCHITECTURE STANDARDS

Standard ID:	SE-EMU-001
Title:	Secure 3270 Emulator
Domain:	Security
Discipline:	Network Security
Revised Date:	9/27/2019
Revision no.:	6
Original date:	7/1/2008

I. Authority, Applicability and Purpose

- A. **Authority:** [Title 29](#) Chapter 90C Delaware Code, §9004C – General Powers, duties and functions of DTI “2) Create, implement and enforce statewide and agency technology solutions, policies, standards and guidelines, including as recommended by the Technology Investment Council on an ongoing basis and the CIO”
- B. **Applicability:** Applies to all State of Delaware communications and computing resources. DTI is an Executive Branch Agency and has no authority over the customers in Legislative and Judicial Branches, as well as School Districts, and other Federal and Local Government entities that use these resources. However, all users, including these entities, must agree to abide by all policies, standards promulgated by DTI as a condition of funding, access and continued use of these resources.
- C. **Purpose:** Due to the importance of mainframe communication standards in State functions, including the management of resources and the sharing of information, it is necessary to establish acceptable parameters for the transmission of mainframe communications. This standard specifies the software products to be employed by the State of Delaware in its use of terminal emulation.

II. Scope

- A. **State of Delaware:** All individuals that require 3270 access to the DTI managed mainframes located at the William Penn Data Center.
- B. **Areas Covered:** Communications from a client program to the mainframes.
- C. **Environments:** CICS, TSO, TPX, and any other mainframe Telnet 3270 applications.
- D. This standard applies to the use of 3270 emulation tools and technologies.

III. Process

These standards are adopted by the Department of Technology and Information (DTI), through the Technology and Architecture Standards Committee (TASC), and are applicable to all Information Technology use throughout the State of Delaware. Any questions or comments should be directed to dti_tasc@state.de.us.



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- A. **Adoption:** These standards have been adopted by the Department of Technology and Information (DTI) through the Technology and Architecture Standards Committee (TASC) and are applicable to all Information Technology use throughout the state of Delaware.
- B. **Revision:** Technology is constantly evolving; therefore the standards will need to be regularly reviewed. It is the intent of the TASC to review this standard annually. The TASC is open to suggestions and comments from knowledgeable individuals within the state, although we ask that they be channeled through your Information Resource Manager (IRM).
- C. **Contractors:** Contractors or other third parties are required to comply with these standards when proposing technology solutions to DTI or other state entities. Failure to do so could result in rejection by the Delaware Technology Investment Council. For further guidance, or to seek review of a component that is not rated below, contact the TASC at dti_tasc@state.de.us.
- D. **Implementation responsibility:** DTI and/or the organization's technical staff will implement these best practices during the course of normal business activities, including business case review, architectural review, project execution and the design, development, or support of systems.
- E. **Enforcement:** DTI will enforce these best practices during the course of normal business activities, including business case and architectural review of proposed projects and during the design, development, or support of systems. These best practices may also be enforced by others during the course of their normal business activities, including audits and design reviews.
- F. **Contact us:** Any questions or comments should be directed to dti_tasc@state.de.us.

IV. Definitions/Declarations

A. **Definitions**

1. "Secure 3270 emulation" means that data transmitted over TCP/IP to and from a mainframe Telnet 3270 emulator will be encrypted.
2. All 3270 connections to State mainframe computers must be encrypted.

B. **Declarations**

1. This standard speaks to software products and not data. Please refer to the State of Delaware Standards and Policies page for data-specific policies and standards.
2. The coordination and promotion of Secure 3270 emulation among all levels of government is essential to the efficient and smooth provision of government services to the people of the state of Delaware.
3. Scripting of a log-on authentication is strictly prohibited. (Users are to refrain from creating a box to contain their credentials – login ID, password – for the purposes of a shortcut to be executed as a single key stroke)
4. Tools like 'screen-scrapers' that use 3270 emulation protocols to communicate to the mainframe must also be secured.

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V. Definitions of Ratings

COMPONENT RATING	USAGE NOTES
<p>STANDARD – DTI offers internal support and/or has arranged for external vendor support as well (where applicable). DTI believes the component is robust and solidly positioned in its product life cycle.</p>	<p>These components can be used without explicit DTI approval for both <u>new projects</u> and <u>enhancement</u> of existing systems.</p>
<p>DECLINING – Deprecated - DTI considers the component to be a likely candidate to have support discontinued in the near future. A deprecated element is one becoming invalid or obsolete.</p>	<p>Via the State’s waiver process, these components must be explicitly approved by DTI for <u>all projects</u>. They must not be used for <u>minor enhancement</u> and <u>system maintenance</u> without explicit DTI approval via the State’s waiver process.</p>
<p>DISALLOWED – DTI declares the component to be unacceptable for use and will actively intervene to disallow its use when discovered.</p>	<p>No waiver requests for new solutions with this component rating will be considered.</p>

- A. Missing Components** – No conclusions should be inferred if a specific component is not listed. Instead, contact the TASC to obtain further information.



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VI. Component Assessments

#	Component	Rating	Comments
1	Jolly Giant Software		
	QWS Secure v4.8 or above	Standard	Required Cyber Suite SHA-2
	Any QWSPlus Version	Disallowed	Retired
2	Attachmate		
	Reflection v14.0.5	Declining	Does not support SHA-2
	Extra V7.0 or above	Declining	
	Version 6.x or below	Disallowed	Versions are not SSL Compatible
3	Microfocus		
	Reflection Desktop v16	Standard	Supports SHA-2
4	Hummingbird (Open Text)		
	Host Explorer 2008	Declining	
5	Software AG		
	Entire Connection 4.5.3	Declining	Alternative data sharing methods are preferred.

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