API 1164 Pipeline SCADA Security Conformance Assessment

DeepShield Systems, Inc.

Document Reference: DSS-COMP-2024-001

Date: January 11, 2024

1. Executive Summary

This document certifies DeepShield Systems, Inc.'s ("DeepShield") conformance with API Standard 1164 (Third Edition, 2021) for Pipeline SCADA Security. The assessment covers DeepShield's Industrial Control System (ICS) security platform and associated SCADA protection modules as implemented across client pipeline operations.

2. Scope of Assessment

1. This conformance assessment encompasses:

a) DeepShield ICS Security Platform v4.2

b) DeepShield SCADA Protection Module v2.1

c) Pipeline Operations Security Suite v3.0

d) Associated security controls and mechanisms

2. Assessment Period: October 15, 2023 - December 31, 2023

3. API 1164 Compliance Categories

1. Access Control and Authentication

- Implementation of role-based access control (RBAC)

- Multi-factor authentication for all SCADA system access

- Privileged access management controls

- Session management and timeout controls

2. Network Security

- Network segmentation and isolation

- Encrypted communications protocols

- Firewall and intrusion detection systems

- Remote access security controls

3. System Hardening

- Operating system security configurations

- Application security controls

- Patch management procedures

- System backup and recovery processes

4. Change Management

- Configuration management procedures

- Change control processes

- Version control systems

- Documentation requirements

4. Conformance Details

1. Access Control Implementation

DeepShield's implementation meets or exceeds all API 1164 requirements through:

- Advanced identity management system

- Granular permission controls

- Automated access review processes

- Comprehensive audit logging

2. Network Security Controls

The platform implements:

- TLS 1.3 encryption for all communications

- Network microsegmentation

- Real-time threat monitoring

- Automated incident response capabilities

3. System Hardening Measures

Conformance achieved through:

- CIS benchmark compliance

- Regular vulnerability assessments

- Automated patch deployment

- Secure system configuration baseline

5. Testing and Validation

1. Testing Methodology

- Independent third-party assessment
- Automated security testing
- Penetration testing
- Configuration validation

2. Test Results

All critical controls tested successfully:

- 100% compliance with mandatory requirements
- 95% compliance with recommended practices
- Zero critical findings
- Three low-risk findings remediated

6. Maintenance and Monitoring

1. Continuous Monitoring

- Real-time security monitoring
- Automated compliance checking
- Regular security assessments
- Performance metrics tracking

2. Update Procedures

- Quarterly security reviews
- Monthly patch cycles
- Annual third-party assessments
- Continuous improvement process

7. Legal Disclaimers

1. This conformance assessment represents DeepShield's implementation status as of the assessment date and does not guarantee future compliance.

2. DeepShield maintains the right to modify security controls and implementations while maintaining API 1164 compliance.

3. This document is confidential and proprietary to DeepShield Systems, Inc.

8. Certification

The undersigned hereby certifies that DeepShield Systems, Inc.'s implementation of pipeline SCADA security controls conforms to API Standard 1164 (Third Edition, 2021) requirements as of the assessment date.

9. Execution

EXECUTED this 11th day of January, 2024

DeepShield Systems, Inc.

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10. Document Control

Document ID: DSS-COMP-2024-001

Version: 1.0

Classification: Confidential

Review Date: January 11, 2025