

# IT Infrastructure Redundancy and Resilience Document

## Confidential Document

Prepared for: Potential Investors and Due Diligence Review

Company: Nexus Intelligent Systems, Inc.

Date of Preparation: January 22, 2024

## 1. INTRODUCTION AND PURPOSE

1 This IT Infrastructure Redundancy and Resilience Document ("Document") provides a comprehensive assessment of Nexus Intelligent Systems, Inc.'s ("Company") technological infrastructure resilience, disaster recovery capabilities, and system redundancy strategies.

2 The purpose of this document is to demonstrate the Company's technological robustness, risk mitigation protocols, and strategic approach to maintaining continuous operational integrity across critical technology platforms.

## 2. INFRASTRUCTURE OVERVIEW

### 1 Core Infrastructure Components

- Primary Data Center: AWS US-West-2 Region (Oregon)
- Secondary Disaster Recovery Site: Azure East US 2 Region (Virginia)
- Tertiary Backup Location: Google Cloud Platform US-Central1 (Iowa)

### 2 Infrastructure Specifications

- Total Compute Capacity: 672 vCPU cores
- Total Storage Capacity: 487 TB
- Network Bandwidth: 10 Gbps primary, 5 Gbps secondary connections
- Estimated Infrastructure Value: \$2.4M USD

## 3. REDUNDANCY ARCHITECTURE

### 1 High Availability Design

The Company maintains a multi-region, multi-cloud redundancy architecture designed to ensure:

- a) Immediate failover capabilities

- b) Zero data loss potential
- c) Continuous service availability
- d) Geographically distributed risk mitigation

## 2 Redundancy Levels

- Application Layer: 99.99% uptime guarantee
- Database Layer: Synchronous multi-region replication
- Network Layer: Dual-path connectivity with automatic routing
- Storage Layer: Distributed RAID-10 configuration with instant snapshot capabilities

## **4. DISASTER RECOVERY PROTOCOLS**

### 1 Recovery Time Objectives (RTO)

- Critical Systems: < 15 minutes
- Non-Critical Systems: < 2 hours
- Complete System Restoration: < 4 hours

### 2 Recovery Point Objectives (RPO)

- Transactional Systems: < 5 minutes data loss potential
- Analytical Systems: < 30 minutes data loss potential

## **5. SECURITY AND COMPLIANCE CONSIDERATIONS**

### 1 Compliance Frameworks

- SOC 2 Type II Certified
- ISO 27001:2013 Compliant
- GDPR Data Protection Standards
- CCPA Privacy Regulations

### 2 Security Monitoring

- 24x7 Security Operations Center (SOC)
- Continuous Threat Monitoring
- Automated Intrusion Detection Systems
- Quarterly Penetration Testing

## **6. RISK MITIGATION STRATEGIES**

### **1 Periodic Testing Protocols**

- Quarterly Full Disaster Recovery Simulations
- Monthly Partial System Failover Tests
- Bi-Annual Comprehensive Infrastructure Stress Testing

### **2 Mitigation Mechanisms**

- Automated Failover Triggers
- Intelligent Load Balancing
- Predictive Capacity Management
- Real-time Anomaly Detection

## **7. LIMITATIONS AND DISCLAIMERS**

1 This document represents the Company's infrastructure status as of January 22, 2024. All specifications are subject to change without prior notification.

2 While extensive precautions have been implemented, no technology infrastructure can guarantee absolute immunity from potential disruptions.

## **8. CERTIFICATION**

Executed by:

—

Dr. Elena Rodriguez

Chief Executive Officer

Nexus Intelligent Systems, Inc.

Date: January 22, 2024

## **9. CONFIDENTIALITY NOTICE**

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