

# Post-Quantum Cryptography Readiness

The rise of quantum computing brings both promise and peril – while quantum computers hold the potential to revolutionize industries, they also pose a significant threat to our digital security infrastructure. National Security Memorandum 10 (NSM-10) requires that agencies "prepare now to implement Post-Quantum Cryptography (PQC)." Specifically designed and developed to provide comprehensive enterprise endpoint visibility and automated continuous endpoint monitoring, TYCHON assists organizations with meeting this mandate by delivering 1) a comprehensive inventory of cryptographic systems and 2) a prioritized inventory of vulnerable information systems.

# **CAPABILITIES**



#### Search



Rapidly gather and inventory cryptography source data across applications, files, and connections.



# Visualize



Understand, analyze, and score your risk posture – monitor, trace, and alert on cryptographic inventory changes.



# Act

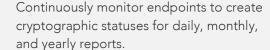


Customize, manage, and enforce policies to address your worst and most vulnerable problems first.



# **Monitor**







# **CRYPTO-AGILITY RISK MANAGEMENT & READINESS**

Take advantage of TYCHON's multiple data sources to collect valuable cryptographic system datasets.







Certificate Files



Encryption Libraries



Listening Services



Web Services



Root Certificates



User Certificates

- Track all Certificates in the Certificate Store
- ▶ Identify Soft Certs on Drives
- Identify Services hosting TLS/SSL Certificates
- Identify Web Service Encryption Methods through Settings
- ▶ Identify Software using Encryption Libraries
- Track External Connections using SSL/TLS
- Investigate the use of Web Browser Applications

# **TYCHON**

# **KEY FEATURES**

#### **TYCHON SENSOR**

Lightweight agent built on a Micro Service engine framework designed to optimize integration with other third-party security vendors and provide superior data quality. Capture thousands of attributes per endpoint and fulfill use cases, such as systems management, cyber hygiene, and more.

- Logins, Permissions, & Users
- ► File Meta Data & Integrity
- ► Installed Software & Settings
- Digital Signatures & Certificates
  - Licenses, Drivers, & Versions

#### **MESH MODEL**

Instantly query up to a million endpoints. Unique TYCHON components, such as Data Management Node (DMN), File Distribution Center (FDC), Dispatcher, and Orchestrator, are built for scalability and fast query response times.

- Deploy Patches
- ▶ Update OVAL / CVE Definitions
- ► Retrieve Files for Forensics
- Device Hardening
- Reducing Attack Surface

#### **OPEN ARCHITECTURE**

TYCHON is built on an open, flexible framework with embedded micro services built using a Client-Server Model with an integrated FIPS 140-2 compliant journal for endpoint data capture. Our custom designed compression algorithm allows data to be sent securely and quickly in any type of network condition, even with low bandwidth restrictions.

- Open, Flexible API Framework
- Embedded Micro Services
- Client-Server Model
- Data Roll-up
- ► Cloud / Hybrid / On Premise
- ► Low Bandwidth / Disconnected
- Best In Class Technical Partners

# RAPID QUERY

Instantly respond to a new threat or IOC, from any vendor, by executing a cleanup, AV update, and services status check across all connected endpoints in a matter of seconds. Accepts both plain English text and full regular expression (REGEX) queries, and employs fail safe measures to guarantee fast and reliable content delivery.

- Flexible Endpoint Targeting
- One-Click Response Actions
- ► IOC Searches
- ▶ Trace
- ► Memory Analysis & Forensics
- Two Person Integrity

# TYCHON JOURNAL

Fully indexed record from every endpoint. Continuously monitor and record endpoint and server activity for near-instant identification of threats – present or past – and the complete view of an incident, root cause analysis, and tracing of network propagation.

- Master Endpoint Record
- ► FIPS 140-2 Compliance
- Historical Data
- Historical Running Processes
- Fuzzy Hash
- Netflow & DNS History

# **DYNAMIC DASHBOARDS**

Interactive dashboards, which display real-time enterprise compliance metrics for up-to-date situational awareness of network risk. Vital reports with details on privileged users, web server compliance, asset inventory, system authorization, required security services, patching, and overall organization software compliance.

- Continuous Comply 2 Connect
- Cyber Hygiene
- Compliance Validation
- ► Resource Utilization
- Strong Authentication
- Zero Trust

# TYCHON COMMUNICATOR / END USER ENGAGEMENT

Close the gap between detection and response with a direct line of communication from the incident responder to the desktop of end users using the TYCHON Communicator platform.

- Displays Persistent Banner
- Send Custom Messages
- Outlook Searching
- User Created / Connected Shares