

**U.S. Department of Commerce
National Institute of Standards and Technology
(NIST)**



**Privacy Threshold Analysis
for the
188-02 Enterprise Continuous Diagnostics and Mitigation (ECDM)**

U.S. Department of Commerce Privacy Threshold Analysis

National Institute of Standards and Technology (NIST)

Unique Project Identifier: 188-02

Introduction: This Privacy Threshold Analysis (PTA) is a questionnaire to assist with determining if a Privacy Impact Assessment (PIA) is necessary for this IT system. This PTA is primarily based from the Office of Management and Budget (OMB) privacy guidance and the Department of Commerce (DOC) IT security/privacy policy. If questions arise or further guidance is needed in order to complete this PTA, please contact your Bureau Chief Privacy Officer (BCPO).

Description of the information system and its purpose: *Provide a brief description of the information system.*

The E-Government Act of 2002 defines “information system” by reference to the definition section of Title 44 of the United States Code. The following is a summary of the definition: “Information system” means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information. See: 44. U.S.C. § 3502(8).

Provide a brief description of the information system.

The Enterprise Cybersecurity and Monitoring Operations (ECMO) System (188-02) is an infrastructure system that provides enterprise-wide continuous monitoring capabilities across the Department of Commerce (DOC) and in support of the Department of Homeland Security’s Continuous Diagnostics and Mitigation (CDM) Program. The System comprises the following components:

188-02 Active Directory SSDOC Domain (H/H/H)

Active Directory provides directory, identity, and domain authentication services to SSDOC components.

188-02 BigFix (H/H/H)

The BigFix infrastructure is segmented via dedicated firewalls in the NIST Shared Service domain (SSDOC) along with other support servers that enable BigFix’s software reporting capabilities. These reporting capabilities consist of Web Reports, Software Use Analytics Reporting, and Security Compliance Analytics.

188-02 CDM Phase 2 applications (H/H/M)

To satisfy CDM Phase 2 requirements for DOC, NIST has implemented the required components to accept needed data feeds from DOC shared systems, including HR Connect and the Commerce Learning Center (CLC) and data feeds from individual participating DOC bureaus, as well as functionality to ingest, aggregate, and store those feeds for purposes of maintaining a MUR for those users.

188-02 Citrix Application (H/H/H)

Citrix serves as the PIV authentication gateway for all users of the ECDM to the SSDOC Domain.

188-02 Locally Managed Servers (H/H/H)

These are servers required to support both ECDM and HCL BigFix Applications.

188-02 Parent (H/H/H)

The components system inherits some controls from the parent system.

188-02 Splunk Application (H/H/M)

Splunk is the data integration transport solution and serves as the central reporting system for auditing and analysis of system events and an Active Directory Domain which provides directory and identity management the SSDOC Domain.

ECDM continuous monitoring capabilities include security status reporting and situational awareness at the enterprise agency level and local Bureau level. While hosted and administered by NIST, management of the applications is executed collectively amongst the individual organizational components and DOC Headquarters.

a) Whether it is a general support system, major application, or other type of system

The Enterprise Cybersecurity Monitoring and Operations (ECMO) System (188-02) is an infrastructure system that provides enterprise-wide continuous monitoring capabilities across the Department of Commerce (DOC) and in support of the Department of Homeland Security's Continuous Diagnostics and Mitigation (CDM) program.

b) System location

The system is located at the NIST Gaithersburg, Maryland and Boulder, Colorado, facilities, within the continental United States.

c) Whether it is a standalone system or interconnects with other systems (identifying and describing any other systems to which it interconnects)

The ECMO System obtains information (in flat files) from the following organizations:

- **Bureau of Economic Analysis (BEA)**
- **U.S. Census Bureau**
- **International Trade Administration (ITA)**
- **National Oceanic and Atmospheric Administration (NOAA)**
- **National Telecommunications and Information Administration (NTIA)**
- **NTIA FirstNet**
- **National Telecommunications and Information Administration (NTIS)**
- **Office of Inspector General (OIG)**
- **Office of the Secretary (OS)**
- **United States Patent and Trademark Office (USPTO)**

d) The purpose that the system is designed to serve

The purposes of the ECMO components are to provide asset management, authenticated configuration, vulnerability, and patch scanning, as well as patch deployment, software deployment, and remote-control services, for DOC assets. Specific to privacy, the Continuous Diagnostics and Mitigation (CDM) functionality requires the management and control of four functions: account/access/managed privileges (PRIV), trust determination for people granted access (TRUST), credentials and authentication (CRED), and security-related behavioral training (BEHAVE).

e) The way the system operates to achieve the purpose

In support of these functions, the ECMO creates and manages a Master User Record (MUR) for every person with access to participating DOC bureau networks.

f) A general description of the type of information collected, maintained, use, or disseminated by the system

Information contained within the attributes that comprise the MUR consists primarily of data found in the 'DOC Person Finder' (e.g., name, email address, phone number, and bureau), user metadata (e.g., status of training requirements and PIV status), and attributes identifying privileged users (for those DOC bureaus that provide that data). Unique identifiers are bureau-generated and are not derived from, nor consist of, personally identifiable information. There is no stand-alone sensitive Personally Identifiable Information (as an independent data element).

g) Identify individuals who have access to information on the system

Information within ECMO is only accessible to authorized DOC users.

h) How information in the system is retrieved by the user

Information is retrieved by authorized users via a DHS commercial-off-the-shelf (COTS) identity management solution. The solution maps data elements to MUR required attributes and provides reporting capabilities for the information.

i) How information is transmitted to and from the system

Information is transmitted, in batch, to the system by participating DOC bureaus using protocols that provide encryption in transit, including Secure File Transfer Protocol (SFTP) and Transport Layer Security (TLS). Once received, the data is processed by matching a user's assigned DOC email address to update or create the record.

Questionnaire:

1. Status of the Information System

1a. What is the status of this information system?

This is an existing information system in which changes do not create new privacy risks, and there is a SAOP approved Privacy Impact Assessment (version 01-2017 or later). (Skip questions and complete certification.)

Changes That Create New Privacy Risks (CTCNPR)
Other changes that create new privacy risks:

1b Has an IT Compliance in Acquisitions Checklist been completed with the appropriate signatures?

2. Is the IT system or its information used to support any activity which may raise privacy concerns?

NIST Special Publication 800-53 Revision 4, Appendix J, states "Organizations may also engage in activities that do not involve the collection and use of PII, but may nevertheless raise privacy concerns and associated risk. The privacy controls are equally applicable to those activities and can be used to analyze the privacy risk and mitigate such risk when necessary." Examples include, but are not limited to, audio recordings, video surveillance, building entry readers, and electronic purchase transactions.

No

Activities
Other activities which may raise privacy concerns:

3. Does the IT system collect, maintain, or disseminate business identifiable information (BII)?

As per DOC Privacy Policy: "For the purpose of this policy, business identifiable information consists of (a) information that is defined in the Freedom of Information Act (FOIA) as "trade secrets and commercial or financial information obtained from a person [that is] privileged or confidential." (5 U.S.C.552(b)(4)). This information is exempt from automatic release under the (b)(4) FOIA exemption. "Commercial" is not confined to records that reveal basic commercial operations" but includes any records [or information] in which the submitter has a commercial interest" and can include information submitted by a nonprofit entity, or (b) commercial or other information that, although it may not be exempt from release under FOIA, is exempt from disclosure by law (e.g., 13 U.S.C.)."

No, this IT system does not collect any BII.

4. Personally Identifiable Information (PII)

4a. Does the IT system collect, maintain, or disseminate sensitive personally identifiable information (PII)?

As per OMB 17-12: "The term PII refers to information that can be used to distinguish or trace an individual's identity either alone or when combined with other information that is linked or linkable to a specific individual."

Yes, the IT system collects, maintains, or disseminates sensitive PII.

The IT system collects, maintains, or disseminates sensitive PII about:

If the answer is “yes” to question 4a, please respond to the following questions.

4b. Does the IT system collect, maintain, or disseminate Social Security numbers (SSNs), including truncated form?

Provide an explanation for the business need requiring the collection of SSNs, including truncated form.
Provide the legal authority which permits the collection of SSNs, including truncated form.

4c. Does the IT system collect, maintain, or disseminate PII other than user ID?

4d. Will the purpose for which the PII is collected, stored, used, processed, disclosed, or disseminated (context of use) cause the assignment of a higher PII confidentiality impact level?

Examples of context of use include, but are not limited to, law enforcement investigations, administration of benefits, contagious disease treatments, etc.

If any of the answers to questions 2, 3, 4b, 4c, and/or 4d are “Yes,” a Privacy Impact Assessment (PIA) must be completed for the IT system. This PTA and the SAOP approved PIA must be a part of the IT system’s Assessment and Authorization Package.

Is a PIA Required?	Yes
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CERTIFICATION

X The criteria implied by one or more of the questions above **apply** to the 188-02 Enterprise Continuous Diagnostics and Mitigation (ECDM) and as a consequence of this applicability, a PIA will be performed and documented for this IT system.

The criteria implied by the questions above **do not apply** to the 188-02 Enterprise Continuous Diagnostics and Mitigation (ECDM) and as a consequence of this non-applicability, a PIA for this IT system is not necessary.

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