Privacy Impact Assessment
for the

Virginia Systems Repository (VSR):
Data Repositories
DHS/FEMA/PIA – 038(a)

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Abstract

The Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), Office of Response and Recovery (OR&R), Recovery Directorate develops, maintains, and supports the Virginia Systems Repository (VSR). VSR is a multifaceted system that develops and deploys applications and services to support the rapidly changing needs of FEMA programs. VSR also has data repository capabilities that systematically ingest and store information from various FEMA source systems for the explicit purpose of replication and use by VSR applications. FEMA is conducting this Privacy Impact Assessment (PIA) to document the retrieval, replication, and storage of personally identifiable information (PII) held in VSR data repositories.

Introduction

VSR is operated by FEMA’s OR&R, Recovery Directorate, National Processing Service Center (NPSC) Enterprise Coordination and Information Management (ECIM) Technical Solutions Team (TST). The system enables FEMA to quickly respond to requirements from Congress or FEMA leadership by developing and deploying applications to enhance disaster response and recovery programs. For example, a FEMA application collects and disseminates operational and survivor information from FEMA and sends it to other government entities and disaster assistance organizations.

VSR is the database that houses numerous minor applications that perform various functions in support of FEMA’s mission. Some of these applications require the collection of PII or other information. For example, a VSR application may require a disaster registration number to accurately determine whether an individual has already received disaster assistance or qualifies for continued disaster assistance from FEMA.

FEMA created data repositories within VSR so that all VSR applications have a common location from which to retrieve and replicate information. The data repositories eliminate the need for each individual minor application to connect to the source systems and retrieve data, thereby increases efficiency of the application. The Common Library (CLIB) and RATS1 are the two VSR data repositories that were created for these purposes. The entire VSR system is covered by multiple PIAs2 because of the sheer size and varying functionality of the VSR applications. This PIA covers the information stored in the VSR data repositories (CLIB and RATS).

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1RATS is a system name rather than an acronym and is not the same system as FEMA’s Request Action Tracking System.
2The remaining components of VSR are covered by two additional PIAs: “Minor Applications Housing PII for FEMA Employees and Applicants,” and “Minor Applications Housing PII on Field Contractors/Inspectors.” (http://www.dhs.gov/topic/privacy)
FEMA populates CLIB and RATS with data from the Enterprise Data Warehouse/Operational Data Store (EDW/ODS)\(^3\)\(^,\)\(^4\) and the Individual Assistance (IA) System),\(^5\) which FEMA collects during the course of operations, including disaster response. EDW/ODS and the IA System receive and store information from various FEMA source systems. The same systems are the initial point of information collection (i.e., the systems through which FEMA first interacts with, and collects information from, an individual). Information from these systems is routinely transferred and stored in the EDW/ODS and the IA System. The information is replicated to the CLIB and RATS data repositories through scheduled and automated processes. VSR application developers design the program and data administrators determine which data elements get replicated to VSR; this determination can be updated and revised based on the needs of the VSR applications. Only information deemed relevant to VSR applications is replicated rather than replicating the entire database.

The data repositories are “intermediary” systems. They merely receive replicated information from EDW/ODS and the IA System and store it until a VSR application needs the information. At this point, the VSR application retrieves and replicates it to accomplish its particular purpose. CLIB and RATS continue to retain the data for later use by VSR applications. These data repositories do not perform any additional functions. There is no mechanism available that allows for routine access to the information stored in the data repositories. VSR database administrators (i.e., those responsible for building the database) are the only individuals who can access the data repositories; however, they do not access them. Once the information is in the data repositories, there are no users who access, use, analyze, or manipulate PII. Only VSR applications that have the appropriate permissions can access the repositories and replicate the information to perform their function. The type of information retrieved and how it is used depends entirely on the function of that specific application.

CLIB and RATS do not collect information from individuals. The source system owners are responsible for explaining how the information will be used and providing notice to individuals. These source systems have their own privacy documentation associated with the information collection by each respective system.

Access to the data repositories is limited to approved VSR applications, and there is no front-end or user access available. Members of the public do not have access to either the CLIB or RATS data repositories.

\(^3\) DHS/FEMA/PIA – 026 Operational Data Store (ODS) and Enterprise Data Warehouse (EDW), June 29, 2012.

\(^4\) A “data store” is a repository for storing, managing, and distributing data sets on an enterprise level (i.e., a data warehouse).

Below is additional information on the two VSR data repositories:

**CLIB**

VSR does not permit any individual VSR application to access another application’s data in order to minimize data or functional redundancy. CLIB is the only data repository that allows for cross-permissions. CLIB is an intermediary system that obtains replicated data elements daily from EDW/ODS. Some VSR applications require the use of CLIB data elements, which may include disaster survivor’s information such as the disaster survivor/registrant’s full name and registration identification number along with related disaster information. CLIB also houses non-PII disaster information such as declaration date, incident start and end dates, disaster numbers, and other disaster related information.

**RATS**

The RATS application is a schema of tables that enables data pushes from the IA System to VSR’s Flood Mapping application. RATS serves as a holding place for incoming data from the IA System. Information contained in RATS includes the full name and staff identification (ID) number of FEMA employees and contractors, as well as the address, latitude, and longitude of the individual’s address, and registration ID of IA applicants. For example, information in RATS may be retrieved and replicated by the Flood Mapping application in order to lookup an applicable flood zone.

**Fair Information Practice Principles (FIPPs)**

The Privacy Act of 1974\(^6\) articulates concepts of how the federal government should treat individuals and their information and imposes duties upon federal agencies regarding the collection, use, dissemination, and maintenance of PII. The Homeland Security Act of 2002\(^7\) states that the Chief Privacy Officer shall assure that information is handled in full compliance with the fair information practices as set out in the Privacy Act.

In response to this obligation, the DHS Privacy Office developed a set of Fair Information Practice Principles (FIPPs) from the underlying concepts of the Privacy Act to encompass the full breadth and diversity of the information and interactions of DHS. The FIPPs account for the nature and purpose of the information being collected in relation to DHS’s mission to preserve, protect, and secure.

DHS conducts Privacy Impact Assessments on both programs and information technology systems, pursuant to the E-Government Act of 2002\(^8\) and the Homeland Security Act.

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\(^7\) 6 U.S.C. § 142(2) (http://www.dhs.gov/xlibrary/assets/hr_5005_enr.pdf).
This PIA examines the privacy impact of VSR’s minor System Administration applications as they relate to the DHS construct of the Fair Information Principles.

1. Principle of Transparency

*Principle:* DHS should be transparent and provide notice to the individual regarding its collection, use, dissemination, and maintenance of PII. Technologies or systems using PII must be described in a System of Records Notices (SORN) and PIA, as appropriate. There should be no system the existence of which is a secret.

The CLIB and RATS data repositories do not collect or use any of the information stored within them; therefore notice is not provided for these two data repositories. Furthermore, the Privacy Act does not require a SORN because records are not retrieved by a personal identifier. Any PII stored within CLIB and RATS is subject to the source system privacy documentation. FEMA provides notice to the public of the information collection at the time of the collection through the source systems, as well as through the applicable PIAs for each source system, and the Disaster Recovery Assistance Files System of Records Notice.  

VSR applications replicate information from CLIB or RATS when the information is ready to be used. Individual PIAs cover the various VSR applications that use this information.

2. Principle of Individual Participation

*Principle:* DHS should involve the individual in the process of using PII. DHS should, to the extent practical, seek individual consent for the collection, use, dissemination, and maintenance of PII and should provide mechanisms for appropriate access, correction, and redress regarding DHS’s use of PII.

FEMA obtains individual consent to collect, use, disseminate, and maintain PII at the initial point of collection by the source systems. CLIB and RATS do not require consent to collect the information because CLIB and RATS are data repositories only and do not collect information directly from individuals. Members of the public are not given access to the repositories. Individuals may contact the source system owner for redress through mechanisms publicized in the PIA and/or SORN. If any redress actions or corrections are made in a source system, the corrected information would first be stored in the EDW/ODS and the IA System, and then replicated and transferred to the CLIB and RATS data repositories.

3. Principle of Purpose Specification

*Principle:* DHS should specifically articulate the authority which permits the collection of PII and specifically articulate the purpose or purposes for which the PII is intended to be used.

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The purpose of the CLIB and RATS data repositories is to create a common location for VSR applications to retrieve, replicate, and use information, eliminating the need to create separate databases for each application. The CLIB and RATS data repositories store information replicated from EDW/ODS and the IA System and hold the information until it is ready to be used by VSR applications. The purpose of the initial information collection depends on the source system itself. Each VSR application retrieves, replicates, and uses information for its own purpose and supports a specific FEMA function.

The FEMA source systems collect, use, maintain, retrieve, and disseminate PII of disaster assistance applicants and disaster response and recovery personnel that may be used by VSR and stored in the data repositories, pursuant to its authorities and obligations under the Stafford Act and Post-Katrina Emergency Management Reform Act (PKRMRA). FEMA collects Social Security Numbers (SSN) from disaster survivors/registrants and from FEMA employees and contractors.

4. Principle of Data Minimization

*Principle: DHS should only collect PII that is directly relevant and necessary to accomplish the specified purpose(s) and only retain PII for as long as is necessary to fulfill the specified purpose(s). PII should be disposed of in accordance with DHS records disposition schedules as approved by the National Archives and Records Administration (NARA).*

The CLIB and RATS data repositories receive and store information from EDW/ODS and the IA System that is specifically relevant to the VSR applications. The entire EDW/ODS and IA system data store is not duplicated and transferred to CLIB and RATS. Information in the CLIB and RATS data repositories is maintained in accordance with NARA Authority N1-311-86-1, item 4C10a. The records are retired to inactive storage after two years and destroyed when they are six years and three months old.

5. Principle of Use Limitation

*Principle: DHS should use PII solely for the purpose(s) specified in the notice. Sharing PII outside the Department should be for a purpose compatible with the purpose for which the PII was collected.*

The CLIB and RATS data repositories do not use the information, but instead hold the information received and stored from EDW/ODS and the IA system so that it is ready for use by VSR applications. FEMA’s source systems limit the amount of PII collected and ensure that the information collection and use is relevant and necessary to support their specific functions. The CLIB and RATS data repositories only receive and store information that is relevant to VSR functions.

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applications and they do not receive replications of the entire EDW/ODS and IA system data stores.

6. Principle of Data Quality and Integrity

*Principle: DHS should, to the extent practical, ensure that PII is accurate, relevant, timely, and complete, within the context of each use of the PII.*

The CLIB and RATS data repositories do not perform any checks for accuracy. The repositories rely on the redress procedures that are implemented by source system applications. Any checks for accuracy and relevance are performed at the time of data collection by the source systems. The information is then replicated and transferred to the CLIB and RATS data repositories from the EDW/ODS and the IA System.

Individuals may contact the source systems for redress through mechanisms publicized in their respective PIA(s) or SORN(s). The corrected information is transferred and stored in the EDW/ODS and the IA System if any redress actions or corrections are made in the source system per the routine transfer of information. The information is then replicated and transferred to the CLIB and RATS data repositories. Data in CLIB and RATS are not indexed and retrieved by personal identifier, and there is no mechanism available that allows for routine access to the information stored in the data repositories. FEMA does not use data in the data repositories to make decisions regarding individuals.

7. Principle of Security

*Principle: DHS should protect PII (in all forms) through appropriate security safeguards against risks such as loss, unauthorized access or use, destruction, modification, or unintended or inappropriate disclosure.*

FEMA protects the CLIB and RATS data repositories by the security safeguards implemented throughout the entire VSR system. These safeguards include supervisor-approved role-based access technical controls, which are used to strictly restrict access to VSR. VSR database administrators (i.e., those responsible for building the database) are the only individuals with access to the data repositories; however, they do not routinely access them. There are no users who access, use, analyze, or manipulate PII once the information is in the data repositories. All applications must go through the formal DHS application development process and be approved by a technical review committee before it can be placed on the server. Only approved VSR applications can access information stored in the data repositories, and there are no other access points into CLIB and RATS. In addition, information security training is required of all VSR users, and supplementary security-related training is provided to those individuals with additional security-related responsibilities. Finally, FEMA does not share information contained in VSR without a demonstrated “need to know” the information requested and a Memorandum of Understanding and/or Information Sharing Agreement in place.
8. Principle of Accountability and Auditing

Principle: DHS should be accountable for complying with these principles, providing training to all employees and contractors who use PII, and should audit the actual use of PII to demonstrate compliance with these principles and all applicable privacy protection requirements.

All FEMA personnel receive annual privacy awareness training. Additionally, the CLIB and RATS data repositories create daily audit logs after each data transfer or update. The database administrator review the audit logs daily to ensure that the data transfer is correct and complete, and to identify any errors.

Conclusion

VSR applications are capable of performing a wide range of functions in support of FEMA’s mission. Privacy considerations for VSR applications are discussed in separate PIAs. VSR streamlined the information retrieval process by creating two data repositories (CLIB and RATS) within the VSR system. FEMA has ensured that privacy principles and protections are embedded in the repositories because of the amount of data that may be stored within them. Data minimization is accomplished by only allowing information that is deemed relevant to VSR applications to be replicated and transferred to the data repositories. The data repositories incorporate data accuracy and redress by receiving regular updates to the data from the EDW/ODS and the IA System. Additionally, the CLIB and RATS data repositories are protected by security safeguards, such as role-based access controls implemented throughout the entire VSR system. Lastly, the information in CLIB and RATS is only accessed and used by VSR applications, and there are no other uses for this information.

Responsible Officials

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Approval Signature Page

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