
International Distributed Unified Reporting Environment

(INDURE) V1.1

Concept of Operations (CONOPS)

Version 1.1 Internet

DRAFT

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Table of Contents

1 Introduction	5
1.1 Scope.....	5
1.2 Document Overview	5
1.3 Background.....	5
1.3.1 INDURE History.....	5
1.3.2 INDURE Capabilities Overview	7
1.3.3 INDURE Architecture.....	8
1.3.4 Network Architecture.....	10
1.3.5 Web Services.....	11
1.4 Documents Referenced.....	12
1.5 Definitions, Acronyms and Abbreviations	12
2 System Concept	13
2.1 System Purpose and Objectives	13
2.2 Operational Policies and Constraints	13
2.2.1 Security.....	13
2.2.2 Training	14
2.3 System Description	14
2.3.1 Server (Virtual Hosted)	14
2.3.2 Workstation (Not Supplied)	15
2.3.3 Operational Environment	15
2.3.4 Users and Affected Personnel	15
2.4 Operational Concept	15
2.4.1 Employment Concept.....	15
2.4.2 Security Concept	15
2.4.3 Data Access Concept.....	16
2.5 Logistics Concept.....	16
3 Version Description	17
3.1 Workstation.....	17
3.2 Server	17
3.2.1 Server Physical Locations	17
3.2.2 Server Logical Configuration.....	17
3.2.2.1 Configuration.....	18
3.3 Web Application Configuration.....	18
3.3.1 Apache 2.2.14 Web Server.....	18
3.3.2 Coldfusion 8.0.1 Enterprise Application Server	18
3.4 INDURE Application.....	20
3.4.1 User Login.....	21
3.4.2 INDURE Reporting Process.....	22
3.4.3 Functionality in INDURE 1.1	22
3.4.3.1 Project Tracker Report.....	22

3.4.3.2 Provincial Reconstruction Team (PRT) Report.....	23
3.4.3.3 Significant Activities (SIGACT) Report	23
3.4.3.4 Socio-Cultural Module	23
3.4.3.4.1 Cultural Entity Report.....	23
3.4.3.4.2 Tribal Element Report.....	24
3.4.3.4.3 Cultural Report and Assessment	24
3.4.3.4.4 Cultural Event Report	24
3.4.3.5 NGO Report.....	24
3.4.3.6 Enhanced Geospatial Visualization Tools	24
4 Operational Thread (Use Case)	25
5 Data Exchange with CIDNE	25
6 Point of Contact Information	26
Appendix A Acronyms	28

List of Figures

Figure 1-1: INDURE Reporting.....	7
Figure 1-2: INDURE in Overall CIDNE Architecture	9
Figure 1-3: INDURE Architecture.....	10
Figure 1-4: INDURE Data Flow Diagram.....	11
Figure 3-1: ColdFusion Application Server Caches Bytecode	19
Figure 3-2: Multiple INDURE Application Instances on Server.....	20
Figure 3-3: INDURE Application Model	21
Figure 3-4: Report Publishing Process	22
Figure 3-5: INDURE GeoQuest Map	25

List of Tables

Table 3-1 INDURE Training Courses	14
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1 Introduction

1.1 Scope

This Concept of Operations (CONOPS) identifies and describes the use of International Distributed Unified Reporting Environment (INDURE) Version 1.1 on the World Wide Web Internet domain. Under the guidance of the United States Central Command (USCENTCOM) Theater and Under Secretary Defense – Intelligence (USD-I), the need for INDURE was scoped and funded. INDURE will be fully interoperable with the Combined Information Data Network Exchange (CIDNE) (which resides on Secret and higher classification networks) and will be able to exchange data with CIDNE. The Secret-to-Unclassified exchange will require data to be air-gapped between the systems due to the classification of the information domain CIDNE resides on and will require FDO and/or release authority to move data between domains.

1.2 Document Overview

This document is divided into the following sections:

- Section 1 - Introduction
- Section 2 - References
- Section 3 – System Concept
- Section 4 – Version Description
- Section 5 – Operational Thread (Use Case)
- Section 6 – Data Exchange
- Section 7 – Points of Contact

1.3 Background

1.3.1 INDURE History

The National Security Council (NSC) established the need for INDURE in June 2009 as a result of the Afghanistan-Pakistan Tribal Knowledge Base (APTKB) effort and directed CENTCOM to provide a capability to bridge information gaps between military and civilian entities operating in the same battlespace. The Afghanistan theater of operations, to include the Afghanistan/Pakistan border region, is the focus of the INDURE initial

operational capability. INDURE was envisioned and funded to provide a standardized way for Non-Governmental Organizations (NGOs), United States Agency for International Development (USAID), and US Department of State (DoS) Provincial Reconstruction Teams (PRTs) to report information on observations and analysis outside of DoD networks as well as provide releasable DoD information back to those organizations for force protection and planning purposes.

As the need to collect, analyze and formulate decision points of Civil Capacity, Civil Information of Concern, and Socio-Cultural information in the current operational engagement becomes more prevalent, so does the need to have a standardized and distributed manner to store the data. It is essential that a common database be made available to facilitate better coordination between organizations and agencies operating in the same geographic areas. This forum is critical to ensure not only that the proper foundations are established, but that these foundations are well-understood and coordinated. Providing a relational data model for INDURE that shares a similar ontology with CIDNE, a CENTCOM-directed reporting capability, is the logical first step forward for INDURE.

As of September 2009, both the Iraq and Afghanistan theaters of operation have stated a profound need for this capability and would like a Jan 2010 initial operational capability of INDURE. While the focus for IOC is Afghanistan, the INDURE Government Off-The-Shelf (GOTS) software will be made available to US Forces-Iraq (USFOR-I) by CENTCOM for fielding in Iraq (architecture is TBD). (See **Error! Reference source not found.**Figure 1-1: INDURE Reporting).

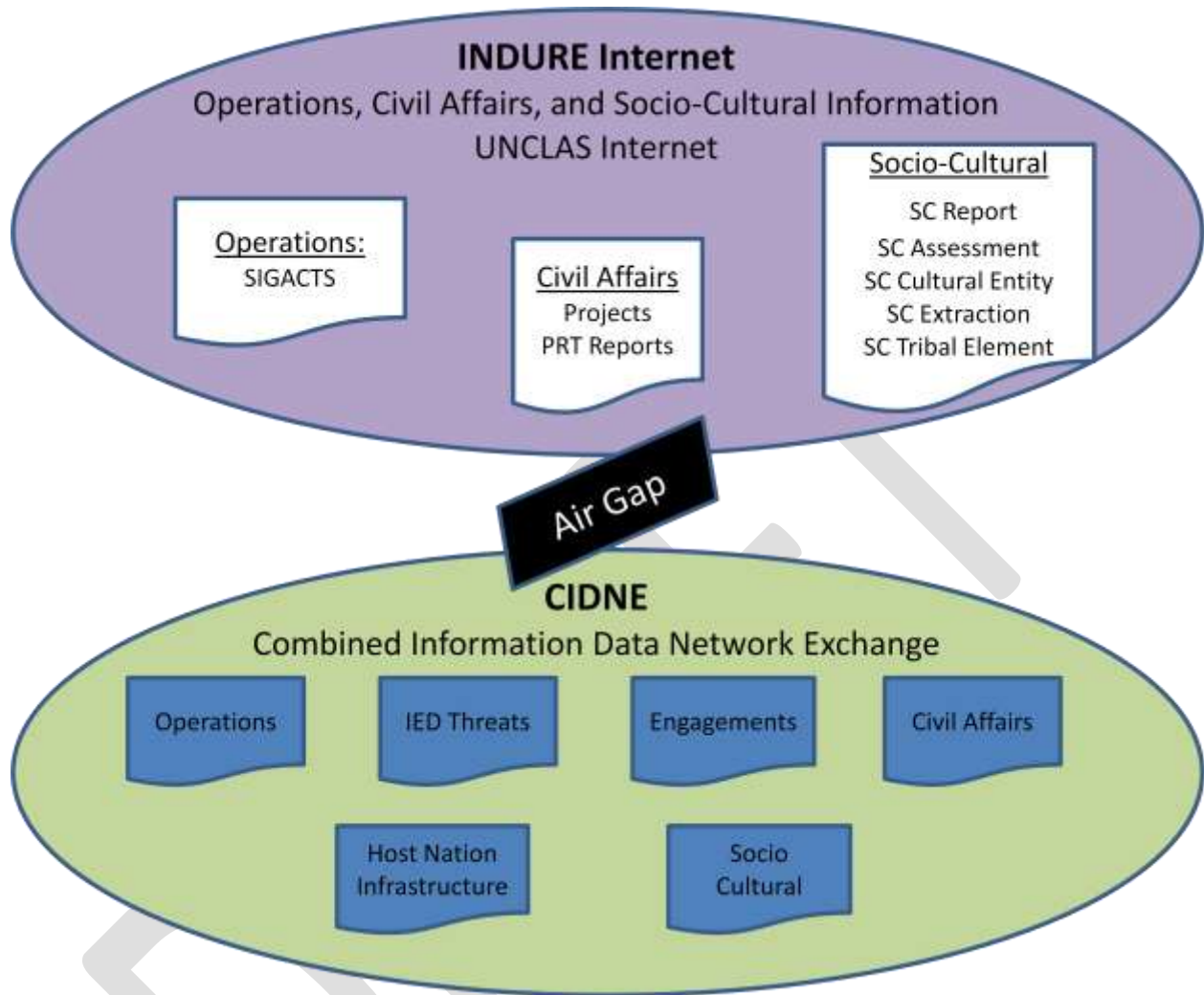


Figure 1-1: INDURE Reporting

1.3.2 INDURE Capabilities Overview

The INDURE software application provides both a data repository and the reporting tools to interact with that repository in a user-friendly manner. Users are able to insert information into the data repository via a wide variety of reports and make that data available to a broad international audience. Furthermore, users can query all the data within INDURE and export that data to a variety of external formats and programs.

INDURE version 1.1 contains structured information on the following:

- **SIGACTS:** UNCLASSIFIED “Significant Activity” reporting repository to collect events of significance in the operational environment.
- **Civil Capacity and Civil Information of Concern Management:** Reports used for reconstruction and transition and project tracking.
- **Engagements:** Information on engagements with host nation individuals, including key leaders, regular tribal members and civilians and their interactions with NGOs and PRTs.
- **Socio-Cultural Information Management:** Structured information on tribal elements, assessments, event histories, and local atmospheric assessments.

All INDURE data can be queried and the results can be sent to the map or other output, including a historical roll-up of SIGACTS. INDURE uses GeoQuest (a web-based map product) to display reports from each of these areas. It is this visual fusion that provides unprecedented clarity and battlespace awareness.

1.3.3 INDURE Architecture

INDURE 1.1 takes advantage of recent improvements in the database and application server architectures of CIDNE. Enhancements include running the INDURE application server in a Java 2 Platform, Enterprise Edition (J2EE) clustered server environment, which provides application level failover. The architecture initially will include multiple nodes on the common hosting environment called the Protected Internet eXchange (PIX). Later decisions may include training and integration servers for Web Services and potentially several operational servers, dependent on communication constraints. Figure 3-2: Multiple INDURE Application Instances on Server highlights the objective information framework that includes the use of a CENTCOM-approved guard solution for bi-directional replication from between US and Coalition networks. In this framework, the SIPR connection and communication to INDURE (Unclassified Internet enclave) will remain air gapped.

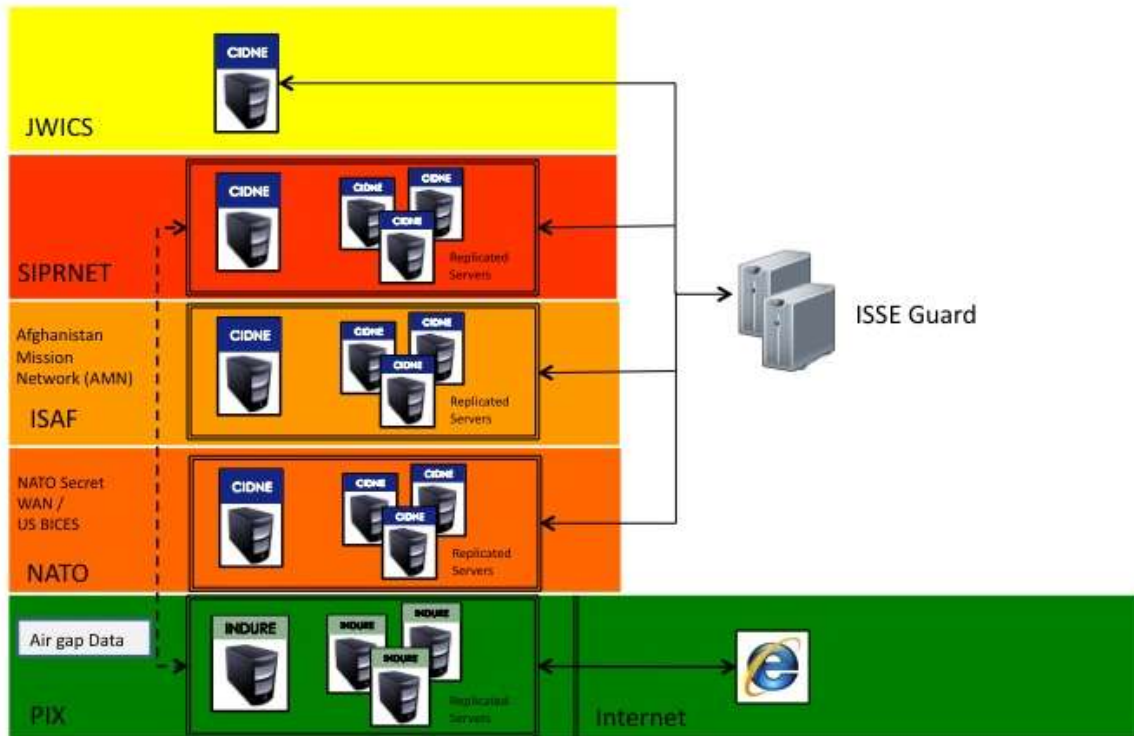


Figure 1-2: INDURE in Overall CIDNE Architecture

The user can collect and organize other data into reporting bins that can be used immediately for analysis or referenced by a team later for amplifying information on a new event or social dynamic that exists. Each community works with the INDURE team to establish information standards, which provide consistency required for data analysis. Once a report is published in INDURE, it is available via a powerful search engine which enables complex searches on any report field. Another feature is the ability to plot reports onto a digital map via GeoQuest, the web-based map tool included in INDURE.

A key feature of INDURE is the capability for an analyst to upload relevant associated media to reports to include documents, spreadsheets, presentations, photos, video, etc. This enables the user to create powerful, relevant products, resulting in a more thorough and complete understanding of the battlespace.

INDURE is a web application designed to run on Internet Explorer 7.0 on any Microsoft Windows platform (desktop or laptop). To run the Report Explorer and GeoQuest mapping capability, Flash 10.0 or better must be installed on the client workstation. The INDURE backend is a structured query language (SQL) 2005 or 2008 database, which is kept in replication with other INDURE databases across theater as they become available. When INDURE is fielded to Iraq and Afghanistan initially they will be deployed as separate replication “clouds,” since the decision was made to keep the data separate.

The INDURE software is government-owned software, developed and managed by CENTCOM in partnership with Air Force Research Laboratories (AFRL). The INDURE

infrastructure requires three COTS licenses: ColdFusion 8 Enterprise Application Server, Microsoft SQL 2005 Standard Database, and Microsoft 2003 Enterprise Server. Organizations with an INDURE server will need to purchase licenses for these products. INDURE also uses a Postgres/PostGis database for geospatial functionality.

1.3.4 Network Architecture

INDURE is accessible on Non-DoD networks in the unclassified information domain, simply put, the World Wide Web. For this reason INDURE will rely on 3rd party hosting and physical server support on a protected Internet enclave. While quality of service will remain high, the availability of INDURE will be contingent on commercial Internet traffic, weather events, unplanned maintenance-driven outages to communication lines, and other events outside of DoD and INDURE abilities to control. Although accessible on the commercial network, it will still remain under the physical control of DoD assets. Figure xx depicts the overall Protected Internet eXchange (PIX) environment, which hosts INDURE and State Department's Tabulae system.

INDURE Architecture Slide (U)

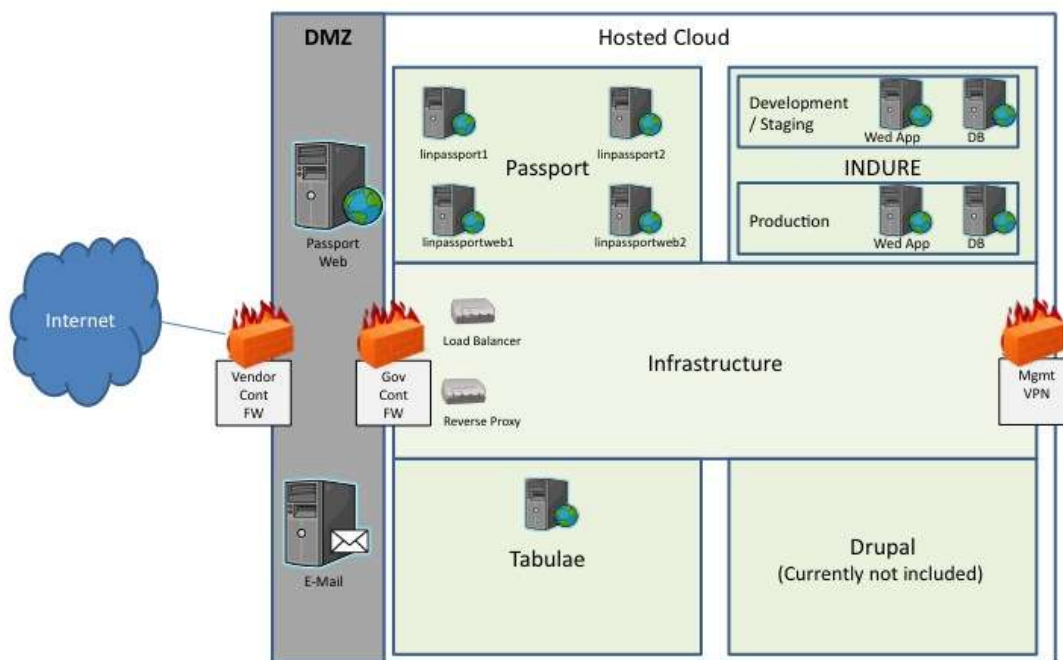


Figure 1-3: INDURE Architecture

The INDURE servers are protected from the Internet by two firewalls, one controlled by a third-party commercial vendor and a second controlled by a third-party government firewall. Access to INDURE is via proxy and users must first log into the PIX

environment via the Passport servers. Figure 4 shows the data flow diagram for INDURE in PIX.

INDURE Data Flow Diagram (U)

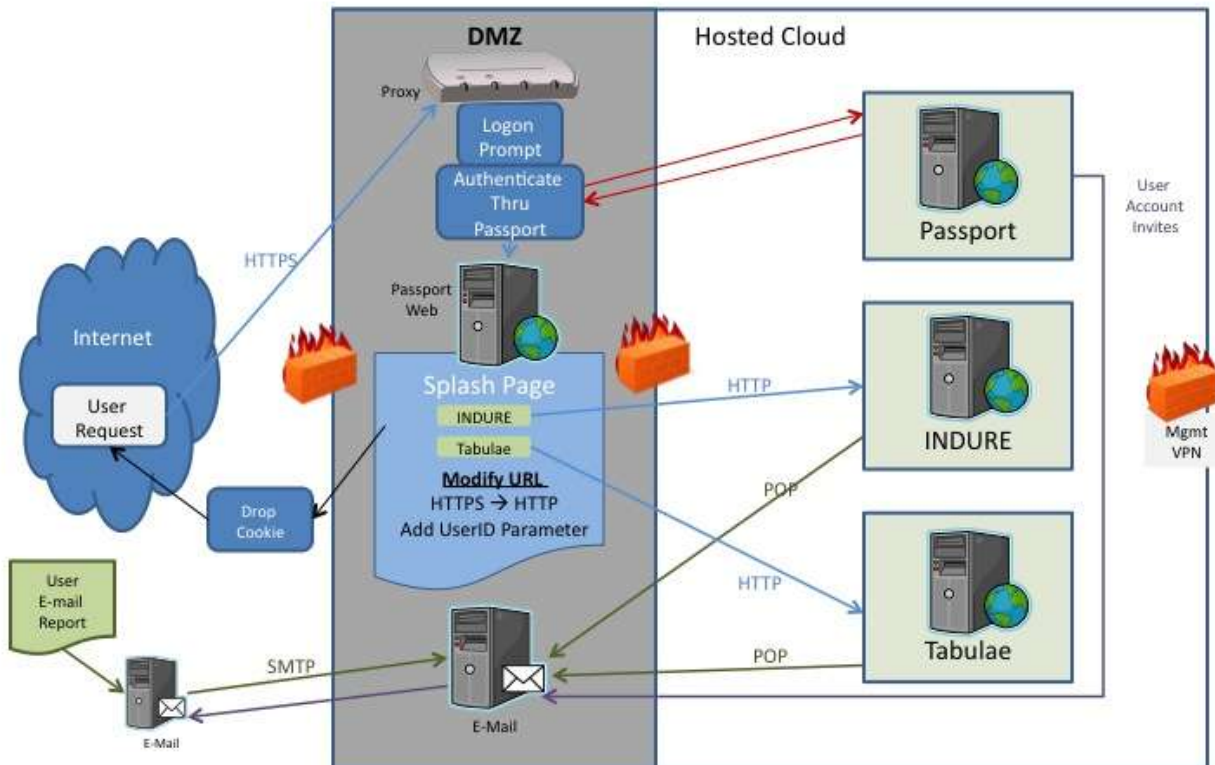


Figure 1-4: INDURE Data Flow Diagram

The data flow includes user requests transmitted to INDURE via the Passport system via secure socket layers (SSL), the standard secure Internet protocol. INDURE can pull email from the Microsoft Exchange server located in the DMZ, which use standard SMTP protocols to receive email from trusted partners. The emails can include unstructured reports which can be parsed into the INDURE database.

1.3.5 Web Services

INDURE web services are not included in version 1.1 but are planned for future releases of INDURE. Like user access to data, web services will require authentication.

1.4 Documents Referenced

The following documents are referenced:

- *INDURE 1.1 Version Description Document (VDD)*
- *INDURE Requirements Coordination Document (RCD)*

1.5 Definitions, Acronyms and Abbreviations

Refer to Acronyms for a complete list of program acronyms.

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2 System Concept

2.1 System Purpose and Objectives

The purpose of INDURE is to provide a data repository into which non DoD communities like NGOs, USAID and others involved in civil capacity, socio cultural information, events of significance and engagement data can all can input, share, extract and analyze data in concert with DoD entities. INDURE provides these communities with standardized reporting tools that span significant activities (SIGACTS), Civil Capacity information, Socio Cultural and Engagement disciplines.

The objectives of INDURE are to provide tools that allow the analyst to:

- Input data for access by the military, USAID and the NGO community via standardized report formats
- Analyze and visualize multi-source data
- Store and query data about events, places, organizations, people, and resources
- Publish data in the INDURE database for use by external organizations
- Input standardized reports that are custom-designed for each functional reporting area, yet available to all interested user communities
- Provide mechanism for ISAF and USFORA to release vetted information to support USAID and NGO operations in Afghanistan

2.2 Operational Policies and Constraints

2.2.1 Security

The deployed system must meet all requirements for a US government system on the Internet, in accordance with the Federal Information Security Management Act (FISMA). A complete accreditation package Department of Defense Information Assurance Certification and Accreditation Process (DIACAP) guidelines is available. The system will meet all requirements for handling UNCLASSIFIED but sensitive data.

INDURE will clearly identify to the user the types data that can be entered. Since the INDURE application is intended to provide access to one data source with users having varying permissions to produce the different types of data, the application must have the ability to limit the user's ability to edit and manipulate the data stored within the INDURE Database. Users will be divided into groups, with each user being a member of at least one group. Each group will be comprised of individual users with the same

permissions to produce data and reports. Access to read-only data in INDURE will be made available to all users with login credentials.

INDURE V1.1 includes integration with a DoS Passport system to allow single sign-on into the Protected Space Cloud. This allows one sign on access to all applications in the cloud, currently, INDURE and Tabulae. The Passport and associated splash page will place a cookie on the users' workstation. INDURE will read this cookie and perform an auto-login to INDURE. This auto-login will establish session information that defines the users' permissions while in INDURE. User accounts will maintained in both INDURE and Passport. INDURE accounts holding permission information for the users' INDURE session and Passport holding password information for authentication.

The following documentation will be prepared for the initial deployment of the application:

2.2.2 Training

The INDURE Program Management Office (PMO) is developing training materials in compliance with the AFRL and USCENTCOM guidelines. A variety of media will be utilized to address the surge and residual training needs for all levels of users. Full descriptions of these courses can be found in the Training Management Plan (TMP) (TBD).

The following types of training will be provided:

Table 2-1 INDURE Training Courses

Course	Description
Basic User Training	Basic training on how to use the reporting tool and understand the data results will be provided to experienced analysts who are responsible for identifying trends and patterns in data.
Mobile Training Teams	Intermediate training on more advanced features of the tool and on job-specific uses of the tool will be provided to analysts who have completed Basic User Training.

2.3 System Description

The INDURE software is government-owned software, developed and managed by Air Force Research Laboratories (AFRL) with US Central Command (USCENTCOM) as the Operational Manager.

2.3.1 Server (Virtual Hosted)

The INDURE 1.1 server requires several Commercial Off-the-Shelf (COTS) licenses, including ColdFusion 8.0.1 Enterprise Application Server, Microsoft SQL Server 2005

SP3 Database, and Microsoft 2003 Enterprise Server. Organizations with a physical INDURE server will need to purchase licenses for these products. Postgresql 8.3 and PostGis 1.4.1 database is used to provide geospatial functionality. Enterprise INDURE servers use SQL Replication as the replication engine between SQL 2005 databases.

2.3.2 Workstation (Not Supplied)

The INDURE 1.1 web application is designed to run on Internet Explorer (version 7.0) on any Microsoft Windows platform (desktop or laptop). To run the Link Analysis and GeoQuest Lite web mapping capabilities, Flash 10.0 or better must be installed on the client workstation. Flash 10.0 can be downloaded from any INDURE server and installed by a local Information Management Officer (IMO).

2.3.3 Operational Environment

INDURE will be fielded on virtual servers hosted on a single or multiple physical servers managed by DoD.

2.3.4 Users and Affected Personnel

The primary users of the system are NGOs, DOS, PRTs, USAID and other collectors and analysts who will be collecting information for trends and tracking of Social or Civil information. These same analysts can utilize one or more data sources and view the results of queries.

2.4 Operational Concept

2.4.1 Employment Concept

The INDURE database and application is made available to users on the commercial UNCLASSIFIED network on a protected need-to share/need-to-know basis.

2.4.2 Security Concept

Security for INDURE will be handled at several levels. The INDURE Administrator can set permissions and perform security management for the INDURE groups and users. Depending where INDURE is physically installed will modify or adjust security needs accordingly.

INDURE 1.1 network requirements for user log on, password rules, encryption, are all set forth in the Requirements Coordination Document (RCD). The details for this new functionality can be viewed in INDURE 1.1 Version Description Document (VDD) (TBD), and will be incorporated into all future builds.

The local Security Officer (SO) at the command (or INDURE Administrator) will be responsible for verifying the user's need for access and will create the accounts. Only users with a valid username and password will be allowed to access the software.

All users can invite another user to use INDURE by adding the user account information within their group. In their group, one or more users will be designated as a 'Trusted Agent'. The Trusted Agent (TA) can approve the user's account. The user will get the same permissions as the rest of the group. The TA will then add and approve the user's account in Passport. The new user will be sent an e-mail with their user ID (e-mail address) and password. User is a group that have been given Admin—Tools—Account Management permission can create Groups and Organization and assign permissions at and below their Organization level. INDURE administrators can perform all these duties from the top of the account structure.

2.4.3 Data Access Concept

The data to be accessed by INDURE is contained within the INDURE database. All communities with commercial Internet access and proper permissions will be able to input their data into the INDURE database, and also query all the data input by other communities in order to perform analysis. INDURE data is proposed to be air-gapped between the commercial networks up to high classification domains. Data flowing back down to a lower classification is limited, due to the data classification level and will be air-gapped and validation checked before this occurs. Only certain users with specific permissions will be able to manipulate the data such as perform edits, submit for validation and publish the data to public. Users will have a variety of permissions, based on the structure set up within the workflow of their group and unit.

2.5 Logistics Concept

ISS builds the software and manages the configuration for INDURE. Hardware and virtual environment for hosting will be provided by the Protected Space Contractor (PSC) hosting INDURE. The INDURE PMO supplies limited installation, training, and field support assistance to any command that requested assistance in setting up the software and training users.

When future releases of INDURE become available, the installation of the new software will be the responsibility of ISS Inc. in conjunction with the PSC hosting the virtual environment. ISS engineers will apply updates first to a staging server in the PSC, then to production servers. The INDURE Field Engineer at each site will provide refresher training to the INDURE users. Training will consist of general user training, reporting, and advanced system administration. Training must be coordinated with the Operational Manager for INDURE (see section 6 Point of Contact Information). The help desk will be augmented 24/7 by on-call personnel.

The INDURE Field Engineer will be responsible for Operations and Maintenance (O&M) of the software. Software upgrades will be coordinated with the affected commands.

3 Version Description

The INDURE software is government-owned software, developed and managed by CENTCOM in partnership with Air Force Research Laboratories (AFRL). This release constitutes the INDURE 1.1 product suite, which is the second release to the core INDURE modules. The software is to be delivered and installed using the standard INDURE installation package configuration. INDURE and the required third party software are installed on a server, and users can connect to INDURE via their own workstation that requires minimal additional software.

INDURE 1.1 will integrate with the PSC Passport system. Passport will handle all user authentications and place a cookie on the users' workstation. INDURE will read this user information and apply the permissions to the user session as defined in the INDURE account management system.

3.1 Workstation

The INDURE 1.1 web application is designed to run on Internet Explorer (version 7.0) on any Microsoft Windows platform (desktop or laptop). To run the Link Analysis and GeoQuest Lite web mapping capabilities, Flash 10.0 or better must be installed on the client workstation. Flash 10.0 can be downloaded from any INDURE server and installed by a user or, if elevated permissions are required, by a local administrator.

3.2 Server

The INDURE server will house the INDURE Database, INDURE application, and required third party software. The INDURE infrastructure requires several Commercial Off-The-Shelf (COTS) licenses, including ColdFusion 8.0.1 Enterprise Application Server, Microsoft SQL Server 2005 SP3/ 2008 Database, and Microsoft 2003 Advanced Server. Organizations with an INDURE server will need to purchase licenses for these products. Postgresql 8.3 and PostGis 1.4.1 database is used to provide geospatial functionality. Additional third party software required for install are Apache 2.2.4, OpenSSL 0.9.8i (include with Apache on INDURE install disk), .NET 3.5 SP1 and JRE 1.0_14, and ExamDiff Pro.

3.2.1 Server Physical Locations

INDURE servers will be placed in PSC-accredited facilities at the direction of CENTCOM J2. Multiple virtual servers will be at each location to provide failover support to minimize downtime.

INDURE servers will be deployed initially to support operations in Afghanistan and will later be deployed to support operations in Iraq.

3.2.2 Server Logical Configuration

INDURE servers support the web application, database operations, and media storage. The configuration of the servers is designed for optimal performance for each of these

functions. The following section describes the standard configuration for an INDURE server.

3.2.2.1 Configuration

INDURE will be configured with MS Windows 2003 Enterprise Server. The builds are dependent on the server functions; in future builds, some servers may be designed to support specific functions such as analysis functions requiring heavy I/O functions on the server and webservice to allow multiple external customers to query INDURE data for use in other applications. These servers will be built with Windows 2003 Enterprise Server, MS SQL 2005 Enterprise (or Standard, if Enterprise is not required), and ColdFusion 8.0.1 Enterprise Application Server.

3.3 Web Application Configuration

The INDURE Web Application server is configured using clustered ColdFusion servers running J2EE with Enterprise Application Archive (EAR) deployment. This will be hosted on multiple virtual servers initially, if bandwidth and latency are issues other options may be extended for future releases of INDURE.

3.3.1 Apache 2.2.14 Web Server

INDURE 1.1 utilizes Apache 2.2.14 web server. Apache is an industry standard web server which provides high reliability and scalability. INDURE uses two optional Apache modules: `mod_auth_sspi` and `mod_deflate`. `Mod_auth_sspi` enables INDURE to support single sign on via Kerberos Authentication. `Mod_deflate` compresses content, including media files, sent to the user's browser in order to minimize bandwidth use. For technical details on Apache, visit <http://httpd.apache.org/>.

3.3.2 Coldfusion 8.0.1 Enterprise Application Server

The INDURE application consists of multiple files that are stored within a specified set of directories on the server. When a user requests a web page that is part of INDURE, the Apache server hands the request to the web container containing the ColdFusion runtime. As displayed in Figure 3-1: ColdFusion Application Server Caches Bytecode upon initial page request, ColdFusion compiles INDURE application files in Java bytecode, at which time it is executed and cached to disk. All subsequent requests for that page are processed by the cached bytecode. This physical architecture is identical to Java Server Page (JSP); and in fact, JSP can be run inside the same J2EE container. Additionally, ColdFusion allows seamless access to Java class files, which can be instantiated directly in the ColdFusion code. INDURE leverages this approach in the use of SQL full-text search results.

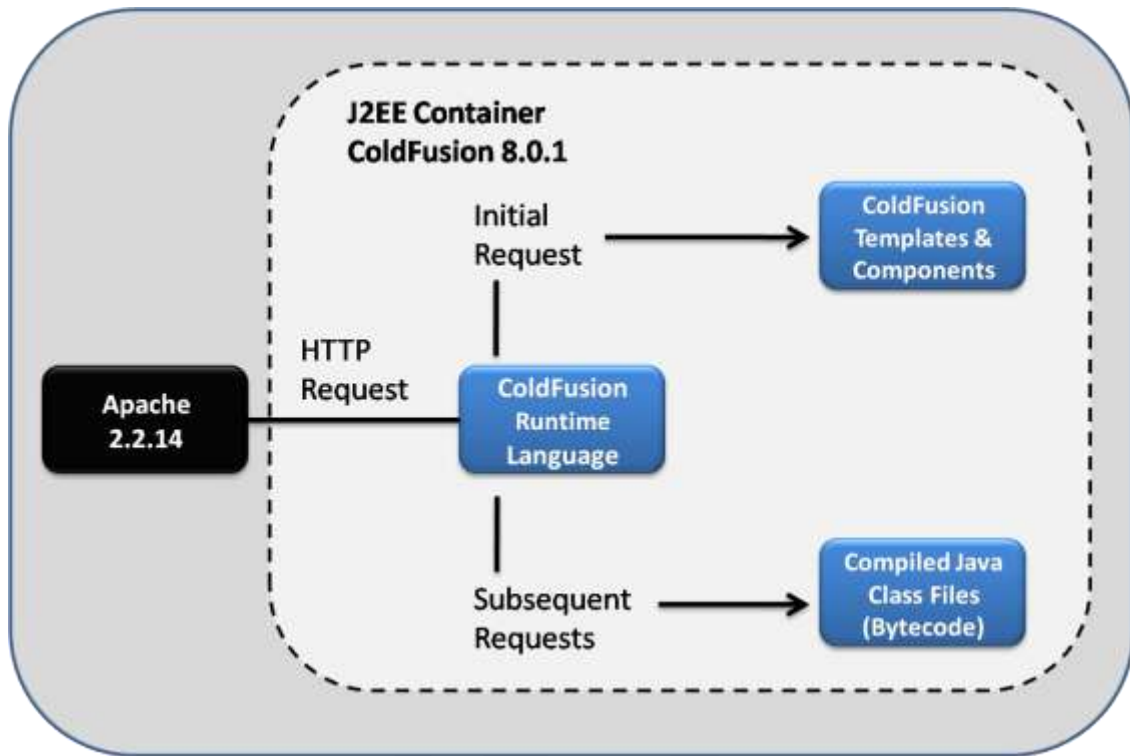


Figure 3-1: ColdFusion Application Server Caches Bytecode

ColdFusion is a standards-based J2EE application. INDURE is deployed in a Java 2 Web Server Engine (JRUN) J2EE container, which allows ColdFusion to take advantage of the J2EE architecture. This deployment allows INDURE to run with multiple application instances, which separates the application into different processes. This improves performance and failover. **Error! Reference source not found.** is a high level diagram that describes multiple INDURE instances running on a single JRUN Java Application Server. Running multiple instances of the INDURE application per server provides another layer of failover in addition to the failover provided by multiple INDURE servers with databases in replication. The advantage to the multiple instances on a given server is that the user session information is preserved, so there is less interruption to a user's activities.

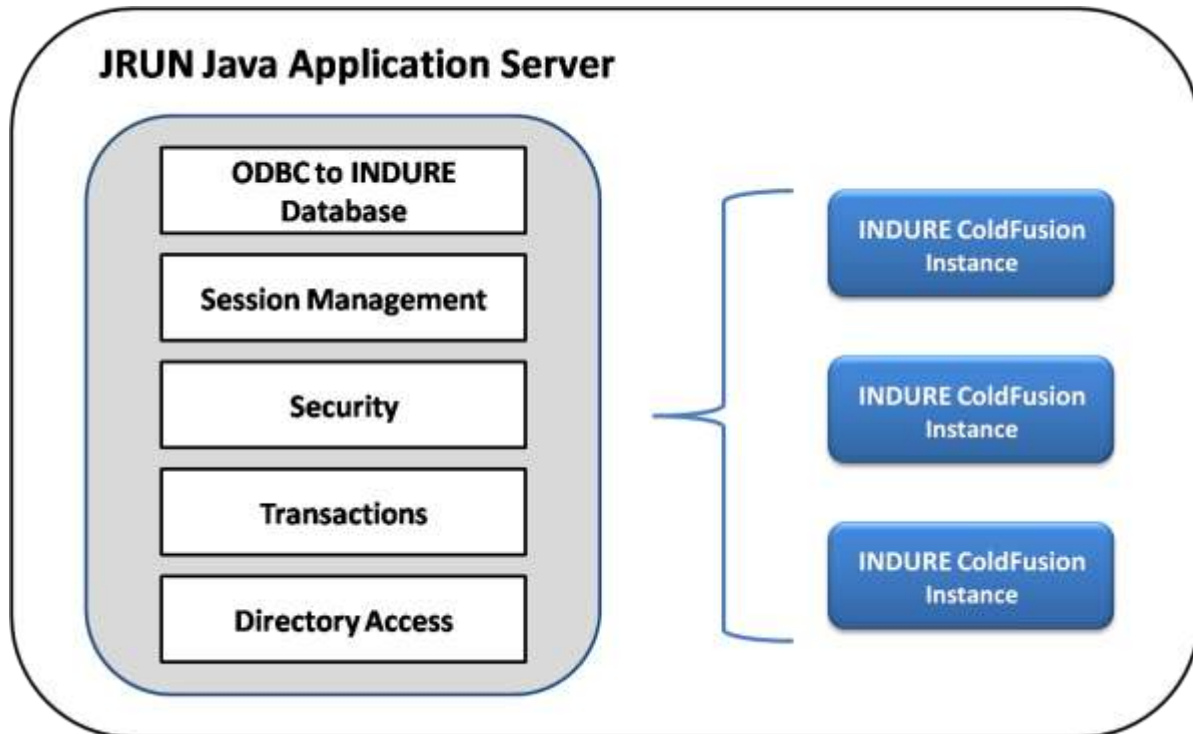


Figure 3-2: Multiple INDURE Application Instances on Server

3.4 INDURE Application

The INDURE application is a data-driven web application that provides data reporting, correlation, and visualization tools. **Error! Reference source not found.** shows the basic application model for INDURE 1.1. At the data level, data is stored in the INDURE MS SQL 2005 database and geospatial reference data is stored in a PostGres/PostGIS database. INDURE 1.1 utilizes a SQL Server full text index for all reports in INDURE, which introduces direct DB search capabilities coupled with structured query results. The results from full-text, Boolean searches are coupled with geospatial queries and direct database queries to provide a robust, accurate access to INDURE data.

INDURE reporting modules are developed working closely with the user community. Each module has reports that have direct access to other reports via associations; however, they are loosely coupled and can be replaced when updated modules are available. Figure 3-3: INDURE Application Model also outlines the primary functional modules in INDURE 1.1; interaction between these modules is at the INDURE Application Infrastructure layer.

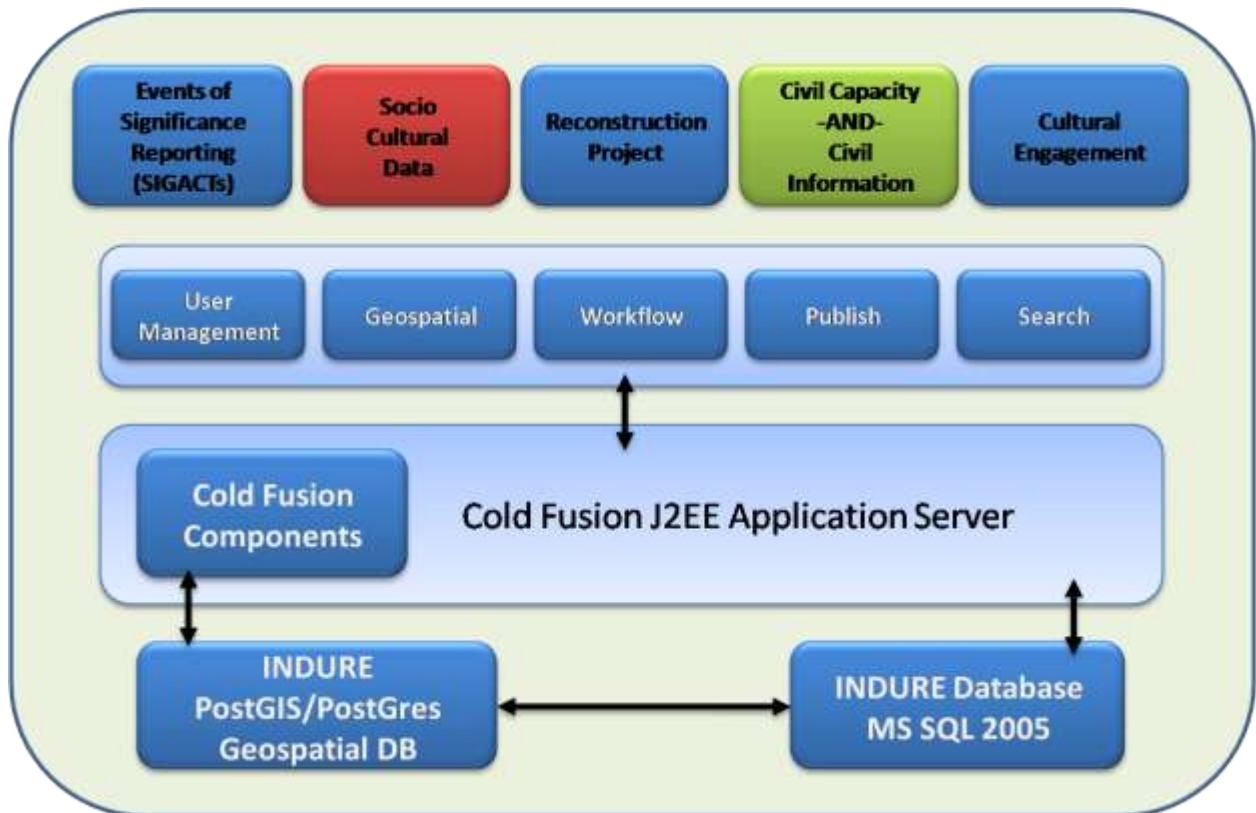


Figure 3-3: INDURE Application Model

The INDURE 1.1 application represents years of lessons learned running a mission critical system on the DoD UNCLAS, SIPR, JWICS, and CENTRIX environments. All reports leverage the same core modules for report drafting, publishing, and searching.

3.4.1 User Login

Upon session request, the user's login name and domain are compared against the INDURE database of authorized users, and if there is a match, the user is logged into INDURE. If they do not match, the user will not be able to access INDURE for any purpose until an account is created for that user by an authorized administrator. The INDURE login screen provides a "request account" link for the purpose of requesting access. INDURE requires strong passwords and will lock out users after an administrator-specified number of login attempts. All login access attempts are logged by INDURE and can be viewed by a server administrator using the system or other authorized event viewer. INDURE 1.1 integrates with PIX Passport. Passport will handle all user authentications. The Passport splash page will place a cookie on the users' workstation with user account information. INDURE will read this cookie and auto-login the user to INDURE and apply permissions as defined in the INDURE account management system. This system provides a single sign-on experience for the user.

3.4.2 INDURE Reporting Process

The reporting process is a core capability of the INDURE application, whether it is to support Operations, Civil Capacity to include Project and PRT reports, Socio-Cultural, or Engagements. INDURE 1.1 utilizes a robust user management and report publishing capability that allows reports to be published at the local level. Figure 3-4: Report Publishing Process shows the basic report publishing process. INDURE 1.1 supports separate draft and publish database tables of all reports.

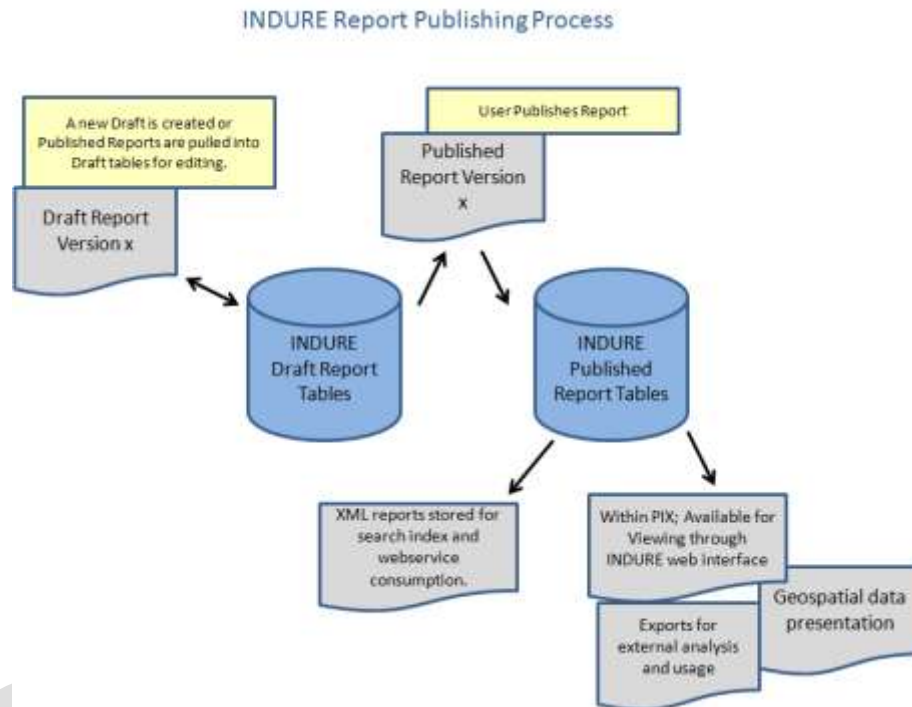


Figure 3-4: Report Publishing Process

3.4.3 Functionality in INDURE 1.1

The paragraphs below give brief descriptions of functionality found in INDURE 1.1. For more detailed information, refer to INDURE 1.1 Version Description Document.

3.4.3.1 Project Tracker Report

The project tracker report captures data on construction projects that are proposed or in progress. Details such as project type, goals, and lines of operation supported, funding sources, status, location, and more are recorded. The project tracker report will be drafted as a standalone report from the Workflow.

3.4.3.2 Provincial Reconstruction Team (PRT) Report

The Provincial Reconstruction Team (PRT) summary is a brief report that allows users to capture basic notes on what the PRT observed on a given date. This report can be used as a base report that other, more detailed reports can be built on when the PRT members have more time. It can also be used to capture details associated with key leader engagements

3.4.3.3 Significant Activities (SIGACT) Report

The SIGACT report is the cornerstone of event reporting in CIDNE. This report is the method by which event information is transmitted through the chain of command and eventually made visible to all users.

The SIGACT report can be completed at any echelon and submitted through a user defined validation chain for publication. The SIGACT report contains the information regarding any event that happens to a unit. Only six fields are required to be entered before submitting a SIGACT report; however, the report can collect well over 100 data points on any given event. Completing as many fields as possible provides a clearer picture of the event to the data consumer.

SIGACT reports in CIDNE are defined by report type and further broken down by category. The following table details the acceptable report type and category combinations. Not all combinations may appear, as certain categories are theater specific.

3.4.3.4 Socio-Cultural Module

The Socio-Cultural Event (SCE) report provides users the ability to track isolated and recurring events across a broad spectrum of interests. INDURE currently captures some of this data through SIGACTS and PRT Reports. Future releases of INDURE may include mechanisms to correlate this data, and allows the user to associate the SCE to other reports in the system such as the Tribal Elements and Cultural Entities. The latter is of particular importance, since the relationship between Cultural Entities such as Religions or Ethnicities and the SCE report will provide a view into events, both recurring and single-instance, that drive large portions of a population.

3.4.3.4.1 Cultural Entity Report

This report type is designed to be relatively static. It provides a means of capturing data on things like Language, Religion and Ethnicity, above and beyond the standard picklist values which normally represent them. The two most important elements of this report type are the simple hierarchy it creates, as well as its use in the tribal element report.

3.4.3.4.2 Tribal Element Report

The tribal element report is a means to capture the demographics of discrete tribes and their hierarchies within other tribal organizations. Demographics include language, ethnicity, and religion.

3.4.3.4.3 Cultural Report and Assessment

The Cultural Report is a shell report, collecting basic data elements that are then inherited by the Cultural Assessments added in the body of the Cultural Report. The intent of the report is to give users a single form to fill out, which provides them an expedited way to associate entities such as Geospatial Folders and Tribal Element reports. When the Cultural Report is published, users who view the entities will automatically see the pertinent Cultural Assessments as well.

3.4.3.4.4 Cultural Event Report

The Socio-Cultural Event report captures information on events that impact Socio-cultural analysis, such as religious festivals.

3.4.3.5 NGO Report

The NGO Report is a wide-open free-text report which enables the users to capture virtually anything. It includes the ability to specify an MGRS or Lat/Long coordinate. Additionally, valid MGRS coordinates will be automatically extracted from report text. Users can draft and publish NGO reports within INDURE or email a free text report to the INDURE server and it will be ingested as an NGO report. Users should not use the NGO when a more appropriate report format exists (ex. Cultural Report).

3.4.3.6 Enhanced Geospatial Visualization Tools

INDURE provides a web-based geo-spatial environment (See Figure 3-5: INDURE GeoQuest Map). Users can query for events and post the results to a geo-spatial map (GeoQuest Lite).



Figure 3-5: INDURE GeoQuest Map

GeoQuest can supply imagery available at the unclassified level. This will include Compressed ARC Digitized Raster Graphic (CADRG) (digital map products) from NGA and commercial imagery as well as offering the capability to link into native or hosted imagery and map data repositories.

4 Operational Thread (Use Case)

NGO plans an operation to visit a village to discuss building a school:

1. Query GeoQuest for route planning considerations and local situational awareness.
2. Review what other projects are in the area for lessons learned and potential duplication of effort with other agencies.
3. Review any local engagements that have been reported via PRT summaries (or releasable CIDNE reports) to determine potential key leaders.
4. Review other Unclassified CMO and PRT reporting in the area.

5 Data Exchange with CIDNE

INDURE provides a capability for USAID, NGOs, and other trusted partners to access unclassified, releasable data produced by those organizations on INDURE; as well as by

Department of Defense elements. As such, some of the data in INDURE, while unclassified, will originate in CIDNE residing on classified defense networks. ISS, responsible for supporting INDURE and CIDNE, does not have authority to determine what data from CIDNE will be released and air-gapped to INDURE. ISS implements the technical capability for this data exchange, and facilitates the movement of data under the guidance and direction of the USCENTCOM and subordinate command Foreign Disclosure Officers (FDOs) and ISAF Theater Disclosure Officers (TDOs).

In the period immediately following IOC on 28 Feb 2010, the following reports are being released from CIDNE to INDURE:

- 1) SIGACTS: Significant activity reporting, to include IED and other enemy activity. Data for the period 1 Sep 2009 – 28 Feb 2010 will initially be used to populate INDURE.
- 2) Civil Affairs Projects: Description, Location, Status
- 3) Socio-Cultural Tribal Hierarchies
- 4) Reference data on Ethnic Groups, Languages, and Religions in Afghanistan and Pakistan
- 5) Releasable PRT reports
- 6) Releasable Socio-Cultural Assessment reports

The CIDNE/INDURE team at USCENTCOM will coordinate with the FDO office for release of this data. Upon IOC, the team will be responsible for updating the data on the following schedule:

- 1) SIGACTS: Once per day, pulling SIGACTs over 48 hours old.
- 2) Civil Affairs Projects: Once per week
- 3) Socio-Cultural Tribal Hierarchies: As required, based on changes (data does not change frequently)
- 4) Reference data on Ethnic Groups, Languages, and Religions in Afghanistan and Pakistan: As required, based on changes (data does not change frequently)
- 5) Releasable PRT reports: Once per week
- 6) Releasable Socio-Cultural Assessment Reports: Once per week.

As additional report types are added to INDURE, the CIDNE/INDURE team will coordinate with the appropriate CENTCOM FDO / ISAF TDO to determine what data will be released.

Data entered into INDURE will be moved to CIDNE once per week.

6 Point of Contact Information

The following individuals are the points of contact for further information regarding the INDURE program.

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Appendix A Acronyms

Acronym	Definition
AFRL	Air Force Research Laboratory
AO	Area of Operations
AOI	Area of Interest
AOR	Area of Responsibility
APTKB	Afghanistan-Pakistan Tribal Knowledge Base
CADRG	Compressed ARC Digitized Raster Graphic
CIDNE	Combined Information Data Network Exchange
CONOPS	Concept of Operations
COTS	Commercial Off-The-Shelf
DIA	Defense Intelligence Agency
DIACAP	DoD Information Assurance Certification and Accreditation Process
EAR	Enterprise Application Archive
FDO	Foreign Disclosure Officer
FISMA	Federal Information Security Management Act
GOTS	Government Off-The-Shelf
HQ	Headquarters
IED	Improvised Explosive Device
IMO	Information Management Officer
INDURE	INternational Distributed Unified Reporting Environment
ISS	Intelligent Software Solutions
J2EE	Java 2 Enterprise Edition
JRUN	Java 2 Web Server Engine
JSP	Java Server Page
NGO	Non-Governmental Organizations
NIST	National Standards of Information and Technology
NSC	National Security Council
O & M	Operations and Maintenance

Acronym	Definition
PIX	Protected Internet eXchange
PMO	Program Management Office
PRT	Provincial Reconstruction Team
SCE	Socio-Cultural Event
SIGACT	Significant Activity
SQL	Structured Query Language
SSL	Secured Socket Layer
TBD	To Be Delivered
TDO	Theater Disclosure Officers
US CENTCOM	US Central Command
USAID	United States Agency for International Development
USD-I	Under Secretary Defense – Intelligence
USFOR-I	US Forces-Iraq
VDD	Version Description Document
WAN	Wide Area Network
XML	Extensible Markup Language