



CDC UNIFIED PROCESS PROCESS GUIDE



SDN OVERVIEW

Purpose of the Process Guide

CDC projects are required to comply with various CDC and Federal regulations, mandates, policies, processes, and standards. Information about these requirements is available from various websites and supporting documents. However, this information is often not presented from the perspective of the project team and their roles & responsibilities in complying with these requirements. CDC UP Process Guides provide that perspective.

CDC UP Process Guides help project teams comply with CDC and Federal requirements by:

1. Setting the requirements in the context of their purpose
2. Providing step-by-step instructions for completing the activities required for compliance
3. Illustrating potential integration points between processes
4. Presenting requirements in a concise, easy-to-understand, and consistent format
5. Making that presentation accessible to the CDC community via the CDC Unified Process website

The specific purpose of this Process Guide is to describe the [SDN Overview](#) process as it applies to project teams.

Process Overview

The Secure Data Network (SDN) provides a strong suite of security controls to host applications and exchange data between CDC programs and public health partners. It provides the highest levels of data integrity, confidentiality, reliability, and security of all CDC application hosting environments. Based on CDC policy, programs that exchange sensitive data must host their systems within the SDN environment and utilize SDN security controls and procedures. Users, including external partners, accessing systems within the SDN environment are required to have digital certificates (x.509) installed on their machines to provide assurances of their identity when they log onto a system. The SDN provides system monitoring on a 24 x 7 basis, data redundancy features, and disaster recovery features for select information systems. SDN services are provided through the National Center for Public Health Informatics (NCPHI).

The SDN allows field staff, researchers, and public health partners to securely exchange data that is considered sensitive but not classified or critical in nature with Center/Institute/Office (C/I/O) programs. The SDN also provides secure access to critical CDC tools, program applications, and sensitive or critical data resources that can be conveniently implemented by the programs.

The SDN offers five services:

- File Transfer
- Application Hosting
- User Enrollment
- Digital Certificate Management
- Authentication and Authorization

The **file transfer service** allows internal and external users to securely distribute files. It allows users to upload or download files.

The **application hosting service** provides an environment to host applications containing information considered to be Controlled Unclassified Information (CUI) or critical in nature. SDN application hosting services are distinguished from other application hosting services that are offered within the CDC because the SDN provides the highest level of authentication and authorization of all the available CDC environments. In addition to the production hosting environment, SDN also includes system development support, which allows programs to develop and test applications that will eventually be hosted in the SDN production environment. Programs building SDN-enabled applications will frequently connect to their back end production systems or databases through the SDN development environment.



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The **user enrollment service** allows authorized individuals to request access to one or more applications administered by CDC program groups and hosted on the SDN. Before connecting to the desired application, a potential user must first complete the enrollment process. This involves creating an SDN account, gaining access approval by the CDC program, being assigned to the appropriate program activities, and installing a digital certificate on his/her browser through an automated process.

The **digital certificate management service** involves purchasing, distributing, managing and maintaining the digital certificates that are installed on user machines.

The **authentication and authorization service** happens once a user has an SDN account and has installed his/her digital certificate. The authentication and authorization system ensures that the user has the appropriate credentials (i.e. digital certificate and pass phrase) and has appropriate access to the service. Users are authenticated and authorized each time they log into an application through the SDN.

The following CDC UP Process Guides are available to provide more information about these services:

- SDN File Transfer Services Process Guide
- SDN Application Hosting Process Guide
- SDN User Enrollment and Digital Certificate Management Process Guide