

Federal Civilian Agencies across government have implemented technology to meet the requirements of Homeland Security (DHS) Cybersecurity and Infrastructure Security Agency (CISA) Continuous Diagnostics and Mitigation (CDM) program. The CDM program office has supported much of this technology implementation using traditional solutions that push information about IT assets into an integration point, and then into databases where manual coding is needed to

present the data on dashboards. This approach has been working however, there is additional expense related to the need

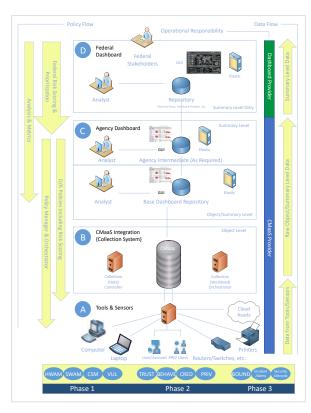
for custom scripting and additional hardware to manage the integration and database requirements.

Challenging the Status Quo

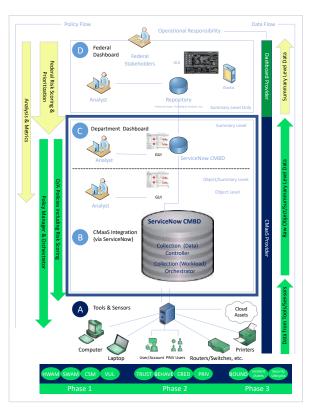
One federal agency saw a better way to approach CDM as part of their overall modernization plans. The agency was using ServiceNow as the platform for their digital transformation. Wanting to get the most out of the investment, they wanted to see if they could use the platform for CDM in addition to the other planned uses.

Understanding how ServiceNow supports integration between legacy systems with modern workflows they saw that a number of the traditional layers used for CDM could be combined for greater efficiency. First, they realized that ServiceNow could provide the connection to push asset data into the integration layer. This meant they no longer needed custom scripting to get data from their tools into CDM dashboards, saving incredible time and reducing the chance of errors.

The agency did a side-by-side comparison of traditional tools and ServiceNow and found that the ServiceNow platform was able to simplify the architecture needed to feed into the CISA CDM dashboard.



Original CDM architecture published by the U.S. Department of Homeland Security on July 18, 2017.



Future desired CDM architecture with ServiceNow.



ServiceNow as Integration Layer for CDM

The solution brought together the first two layers of architecture – agency tools/sensors and the data integration layer – into a single layer that pushes directly into dashboards without any manual coding required. This new approach simplifies the CDM architecture by reducing integration points overall. With this approach the agency is using ServiceNow as their Layer B tool, with the option to use it for Layer C in the future.

With this solution, the agency is driving towards the very first fully SaaS, FedRAMPed model for CDM's Asset pillar. By eliminating two platforms and custom code from the architecture, they are significantly avoiding cost and complexity, while introducing transformative efficiencies. Additionally, having one data model means that the agency can respond to M-21-31 without the duplication of technology.



A new CDM architecture with ServiceNow can deliver:

- · Greater technical efficiencies by reducing overhead and duplicative technologies
- Improved cost efficiencies with the removal of redundant technology and more predictable costs associated with hosting data
- Fully FedRAMP SaaS architecture
- Improved longevity and easier enterprise adoption due to consolidating technology onto a single platform, reducing the need for specialized labor to maintain multiple tools
- Ability to respond to a variety of security and modernization-related Executive Orders and Federal Directives

CDM and Beyond

By implementing CDM capabilities, agencies are better equipped to address vulnerabilities with improved situational awareness across their networks. This visibility allows agencies to meet more stringent and defensive actions to combat the ever-growing threats faced. Zero Trust Architecture, as outlined in NIST 800-207, is not possible without the fundamentals of CDM that allow agencies to know what and who is on the network and what they are doing at all times. Additionally, the CMDB that powers a CDM approach supports reporting on requirements such as BOD 19-02, BOD 22-01, BOD 23-01 and SSCV.

To find out how your agency could implement this approach contact our team at CDM@servicenow.com. For more information on how ServiceNow is helping federal agencies meet government mandates, visit https://your.servicenow.com/civ/government-mandates.

