

Fusion Core Solution for Homeland Security and Public Safety

Integrated Capabilities for Collaboration, Information Sharing, and Geospatial Mapping

Microsoft Corporation, partnering with ESRI, has developed an innovative solution designed to help public safety and homeland security professionals more effectively identify and help prevent threats posed by organized crime, gangs, drug cartels, and terrorists.

Fusion Core Solution is an open and extensible information sharing and analysis architecture that helps municipal, county, regional, state, and federal intelligence and fusion centers improve operations through workflow management, information sharing, and geospatial intelligence technologies.

Addresses Four Main Challenges

Fusion Core Solution is designed to resolve issues in four critical areas within intelligence and fusion centers:

Information Collection and Management

Fusion centers face many significant challenges in collecting and managing vital intelligence effectively. For example, fusion centers have a wide variety of processes for collecting information. After collection, information is often entered into proprietary systems that may have weak or incompatible security access management. Much of the information collected also lacks the geospatial references necessary to be viewed on a map.

With Fusion Core Solution, fusion centers can:

- Access and aggregate data from multiple disparate sources.
- Display data in a way that makes information easier to access and analyze.
- Take advantage of comprehensive privacy and security features.
- Exchange information under governmental and industry standards.

Information Analysis and Modeling

Fusion centers work with massive amounts of information, which can be difficult to organize, analyze, and distill into meaningful and usable intelligence. Without access to effective analysis and modeling capabilities, fusion center analysts often waste valuable time and effort determining what information is relevant to the current task.

Fusion Core Solution provides:

- **Managed Intake:** Preloaded and fully customizable forms.
- **Configurable Workflow:** Four workflows to manage the way fusion center tasks flow.
- **Enterprise Search:** Tools to search across multiple data sources.
- **Integrated Situation Awareness:** Powerful geospatial mapping capabilities.
- **Analyst Collaboration:** Integrated capabilities for websites, wikis, and blogs.
- **External Systems Connectivity:** Easily configured, security-enhanced connections to external data sources.
- **Robust Security and Privacy Technologies:** Integration with existing security features or directly out of the box.
- **Management Reporting:** Powerful reporting capabilities to monitor center activities.

With Fusion Core Solution, fusion centers can:

- Help improve law enforcement and public safety prevention, preparedness, and response efforts.
- Access a situational awareness map to enable faster and better decision-making than what is possible with tabular or textual data.
- Use a workflow to help manage the analytic process—from intake to data query to geospatial mapping—in a much easier manner than with today’s manual processes.
- Integrate commercial or government visual analytic tools.
- Provide senior officials with the information they need to make knowledgeable decisions and facilitate improved collaboration and cooperation among partners.

Information Sharing

Fusion centers facilitate the sharing of information across law enforcement and other public safety and private entities, yet many of the information sharing systems were developed before today’s information exchange standards, such as the National Information Exchange Model (NIEM), were in place. Integrating nonstandard information systems can be difficult and expensive. To make matters more difficult, these systems have varying security models and methods of authentication and authorization that can inhibit effective, more secure information sharing.

With Fusion Core Solution, fusion centers can:

- Support information sharing and collaboration through shared spaces, wikis, blogs, threaded discussions, email, and meetings—all within a security-enhanced online environment.
- Make policy, procedural, and technology improvements by eliciting and receiving feedback about the products and services that fusion centers deliver.
- Provide audit and dissemination logging capabilities that can help fusion centers comply with 28 CFR Part 23 privacy and security requirements.
- Facilitate effective information sharing operations—internally among fusion center personnel and externally with partners and customers.
- Deliver intelligence support in a timely, logical, intuitive, and contextual manner.

Supervisory Oversight

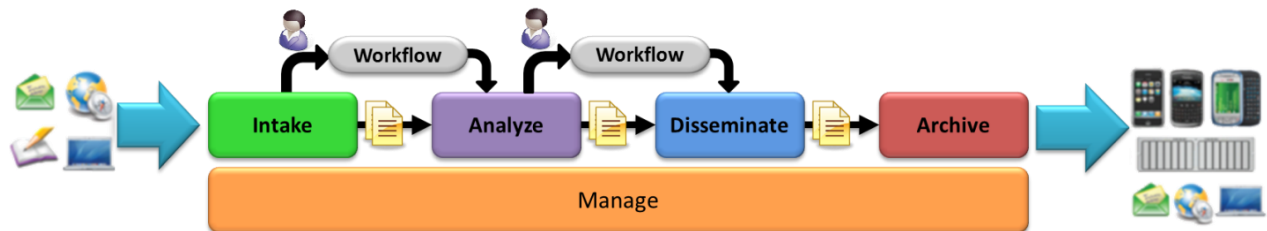
Fusion center directors manage the day-to-day activities of the fusion centers, and their ability to do so effectively and efficiently is directly affected by a lack of integrated information systems. Unfortunately, many fusion centers struggle with manual means of accomplishing daily tasks. It is common to track service requests, work products, and status updates on whiteboards and spreadsheets, and to assign work tasks via telephone and email. Collecting and analyzing fusion center metrics from these sources is therefore decentralized and disorganized.

With Fusion Core Solution, fusion centers can:

- Assign and track work assignments, by analyst and/or product category, and automatically route new service requests to watch commanders for assignment to specific analysts, with configurable intake and task workflows.
- Monitor the status of fusion center staff and analytic work in progress through an Operations portal.
- Have analysts reassign work to other analysts based on configurable alerts about mission needs.
- Collect and visually display performance data on a customized management dashboard.

Supports Effective Center Operations

Fusion Core Solution provides fusion centers with the ability to plan, organize, execute, and manage the four elements of the intelligence mission: intake, analysis, dissemination, and archiving:



Each of these phases is described below, followed by a management component that concerns performance metrics.

Intake – Fusion Core Solution provides many prebuilt service request forms and can automate activities associated with assigning work requests. Analysts can add new service request forms to Fusion Core Solution, and can modify or delete existing types based on operational and analytical requirements.

Analyze – Fusion Core Solution helps analysts conduct research and gather information, identify intelligence gaps, interpret and evaluate information from multiple sources, monitor trends and events related to criminal and homeland security issues, and prepare formal assessment papers and briefing reports.

Disseminate – Fusion Core Solution provides tools to help analysts author, assemble, archive, and distribute finished intelligence products and other reports to appropriate recipients in a security-enhanced and auditable fashion.

Archive – Fusion Core Solution provides tools for fusion centers to store and track the release of finished intelligence products, supporting compliance with intelligence dissemination, and retention policies such as 28 CFR Part 23.

Manage – Fusion Core Solution provides tools to help managers monitor day-to-day fusion center operations. Analysts can collect and present performance data and reports to management, and can use this information to improve quality of services and help justify budget and staffing requests.

Complies with Privacy Requirements

Fusion Core Solution was developed to provide privacy and security tools that help fusion centers comply with federal and state requirements, including:

- Code of Federal Regulations, Title 28, Chapter 1, Part 23
- Information Sharing Environment – Suspicious Activity Report (ISE-SAR) Functional Standard
- DHS Protected Critical Infrastructure Information (PCII)
- Controlled but Unclassified Information (CUI)

Benefits from Powerful Capabilities

Fusion Core Solution provides more than a dozen critical capabilities to help fusion centers process service requests, conduct analysis, produce intelligence products and reports, and manage overall operations.

Capability	Description	Supporting Product
28 CFR Part 23	SharePoint auditing and records management for criminal intelligence collection, retention, and dissemination.	Office SharePoint Server 2007
Document libraries	Libraries manage policies, intake, intelligence products, training materials, and other documents.	Office SharePoint Server 2007
Enterprise search	SharePoint search capability can be configured to search across multiple data sources including file shares, websites, and Microsoft Exchange public folders.	Office SharePoint Server 2007
Feedback form	SharePoint survey capability.	Office SharePoint Server 2007
Forms and workflow	Prebuilt forms and workflow can be used to collect and manage intake to the fusion center. A starter form is also provided for customers to build their own forms.	Office SharePoint Server 2007; Microsoft Office InfoPath 2007
Geographic data management	SharePoint lists are a source of data for the ArcGIS Web Parts for Office SharePoint Server 2007.	Office SharePoint Server 2007; ArcGIS Web Parts for Office SharePoint Server 2007
Geospatial mapping and visualization	Situational awareness map and incident-specific mapping.	ArcGIS Map Web Part for Office SharePoint Server 2007
Lists	SharePoint lists can be created to track open action items, alerts, notifications, and other tasks.	Office SharePoint Server 2007
Management reporting	Custom dashboard provides management with views of the work in progress and includes tools to build management reports.	Office SharePoint Server 2007; Microsoft SQL Server Reporting Services
Performance monitoring	SharePoint site usage reporting tools provide customizable view of fusion center performance metrics.	Office SharePoint Server 2007; SQL Server Reporting Services
Single sign-on service	Interoperates with the Active Directory service; single sign-on access to multiple applications.	Office SharePoint Server 2007
Web Parts	Both out-of-the-box and custom Web Parts. Custom Web Parts work closely with the custom-developed workflow.	Office SharePoint Server 2007
Wiki	SharePoint wiki capability enables analysts and customers to collaborate on criminal, terrorism, and public safety issues.	Office SharePoint Server 2007

Learn More About Fusion Core Solution

To find out more about how Fusion Core Solution can help you meet your mission objectives, please contact the Microsoft Fusion Core Solution team at fusion@microsoft.com. We can discuss your operational and technology requirements and help you evaluate your information analysis and collaboration needs. You can also view more information about Fusion Core Solution by visiting www.microsoft.com/fusion.