EMC BIG DATA ANALYTICS SOLUTION FOR THE PUBLIC SECTOR
Reduce fraud and waste

**ESSENTIALS**
- Define normal patterns of behavior
- Deploy analytic models to detect anomalies
- Integrate results into agency workflows and business processes

**THE NEW BIG DATA OPPORTUNITY IN THE PUBLIC SECTOR**
New data management technologies are fundamentally altering the way that government organizations will be able to use information available to them. Agencies, departments, and commands at the federal, state, and local levels have invested significantly in building deep analytics capability to extract insight from massive amounts of structured and unstructured data. But the key to leveraging this information lies in the ability of those agencies and departments to make that data actionable—sometimes in microseconds.

**LEVERAGE BIG DATA ANALYTICS TO FIGHT FRAUD AND ABUSE**
Through our knowledge of the public sector combined with our strength in technology enablement, EMC® is able to help you take a fresh look at your agency’s approach to controlling fraud and waste. As organizations across both public and private sectors discover the power of new data management technologies to detect and prevent fraud and abuse, government agencies and enterprises alike are making Big Data analytics the centerpiece of their fraud reduction strategies.

Fraud analytics are being used to detect patterns of suspicious transactions in treasury, tax collection, healthcare, social services, and other agency financial applications. Today’s technology enables the use of analytics virtually anywhere to define normal patterns in data sets and react to anomalies in real time to reduce fraud and abuse. With real-time detection and remediation, agencies have the ability to detect, stop, and remediate—resulting in billions of dollars of potential cost savings.

Capitalizing on the new opportunities of Big Data requires building a modern data architecture that can leverage the latest and best technology solutions—like those from EMC Greenplum®; RSA®, The Security Division of EMC; and VMware®—and creating an advanced data science competency to collect, analyze, and act upon these large, complex data sets. EMC Global Services is at the forefront of this trend.

**THE EMC SOLUTION FOR THE PUBLIC SECTOR**
The EMC Big Data Solution for the Public Sector, one of the most advanced fraud detection solutions available in the marketplace, is performed in two steps. The solution detects threats by first creating a baseline against which data can be evaluated. It then manages, assesses, and analyzes a data pool of billions of daily incidents to update existing fraud and waste analytics models and create new ones based upon unusual patterns found in the data.
These results are then used to define the normal patterns of network behavior. The second step is to deploy the new models to detect anomalies in the traffic that are indicative of fraud or waste.

**STEP 1: DEVELOP A “NORMAL” BASELINE**
The EMC Big Data Solution for the Public Sector solution uses the Greenplum Unified Analytics Platform to ingest the petabytes of structured and unstructured data that comprise your normal network traffic. Our team of skilled data scientists and Public Sector experts then refine select EMC network analytics fraud algorithms to your specific needs, enabling us to identify a clear pattern of normal and activities that fall outside these normal parameters.

**STEP 2: DEPLOY ANALYTIC MODELS**
EMC deploys the resulting analytic models (and associated business rules) to detect anomalies in the data that may be indicative of waste or fraud. We use VMware GemFire® technology to stream network traffic information in real time, integrated with RSA NetWitness for evaluation of configured security definitions. RSA NetWitness enables the analysis of network traffic in near real time and uses the RSA enVision® suite to report, route, and resolve incidents as they occur. Finally, we deploy a Splunk capability to add intelligence to the logging process and leverage analytical insight to route suspect activities accordingly.

With seamless integration of VMware GemFire, RSA enVision, and EMC Greenplum, we can help your organization monitor potential fraud and waste activities under the purview of your agency. We also provide seasoned custom application development consultants to help create the appropriate workflows and business processes that are required to address fraud patterns in your application stack.
SERVICE VALUE IN THE PUBLIC SECTOR

EMC serves the needs of federal, state, and local government, including civilian agencies and departments, defense and intelligence agencies, and national non-government organizations (NGOs). Our solutions assist customers in defining and executing the right course of action to achieve success in their drive for Big Data solutions to help them reduce fraud and waste.

EMC consultants understand how to apply technology to solve the unique needs of government organizations. We use field-tested tools, proven methodologies, and best practices gained from engagements across both public and private sectors to minimize risk and optimize time to value in our engagements. With experience in delivering big data projects to customers around the globe, we will provide expert guidance to help you achieve your goals.

EMC GLOBAL SERVICES DELIVERS RESULTS

EMC Global Services provides the strategic guidance and technology expertise organizations need to address their business and information infrastructure challenges and derive the maximum value from their information assets and investments. We are committed to exceptional total customer experience through service excellence. Our 15,000+ professional and support service experts worldwide, plus a global network of alliances and partners, leverage proven methodologies, industry best practices, and experience and knowledge derived from EMC’s information-centric heritage to address the full spectrum of customer needs across the information lifecycle: strategize, advise, architect, implement, manage, and support.