

# Identity Dominance

Cary Dell

**D**ominance over your adversary or competitor is a key to success. In business, it's the best product and the best talent that creates dominance. In sports, it's the best athletes and coaching. On the world stage, it's data gathering and data dissemination among teammates.

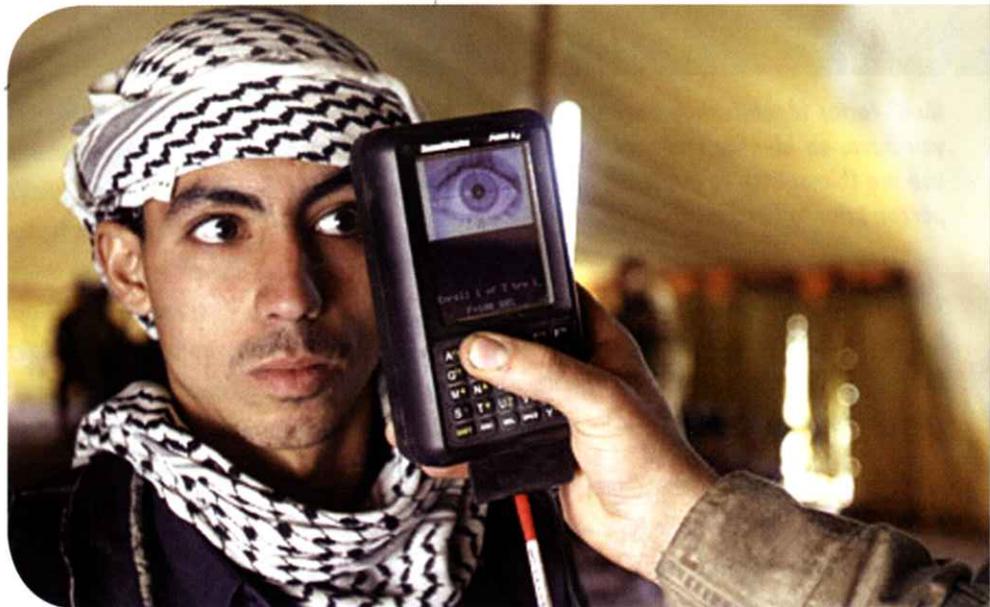
The Biometrics Fusion Center (BFC), Clarksburg, West Virginia, has the tools and the know-how to ensure the Department of Defense establishes identity dominance over its adversaries.

What is identity dominance? At the Biometrics Fusion Center, the staff turns fragments of telltale biometric remnants into pieces of actionable intelligence for other government agencies to puzzle together. The puzzle pieces form pictures of suspected persons of interest, uncover the bad guys who are applying for positions of trust and keep terrorists from treading on our shores. Formed in 2001, the Biometrics Fusion Center and its policy partner group, the Biometrics Management Office, serve the nation from amidst the ranks of the US Army.

Samuel J. Cava, BFC director, has marched the organization into the front lines in the Global War on Terrorism. With its contributions, the BFC has become a valued partner to other DoD

organizations in delivering biometric-based solutions for identity validation and verification.

**Q. What role does the Biometrics Fusion Center play in the nation's use of biometrics?**



**A.** The BFC is the center for biometric technology innovation and implementation of biometric systems throughout Department of Defense. Earning that recognition has taken the center a good four years to establish and we work on enhancing that position every day. Each director who has led the BFC has built upon the lessons learned by the previous leadership.

The BFC is in the midst of a transformation from a biometric technology knowledge center to one that performs biometric system implementations in support of mission critical operations across numerous commands by emphasizing a joint warfighter mindset. We are leading the coordination of biometric operational activities throughout the DoD. Our staff members work shoulder to shoulder with the system users, managing research and development and guiding the operation of enterprise-wide systems. It's definitely an exciting time at the BFC, and the prospects for it continue.

**Q. What is the future for biometrics within the Department of Defense?**

**A.** Biometrics, its use is growing, began to take root soon after the horrific attacks on the Pentagon and World Trade

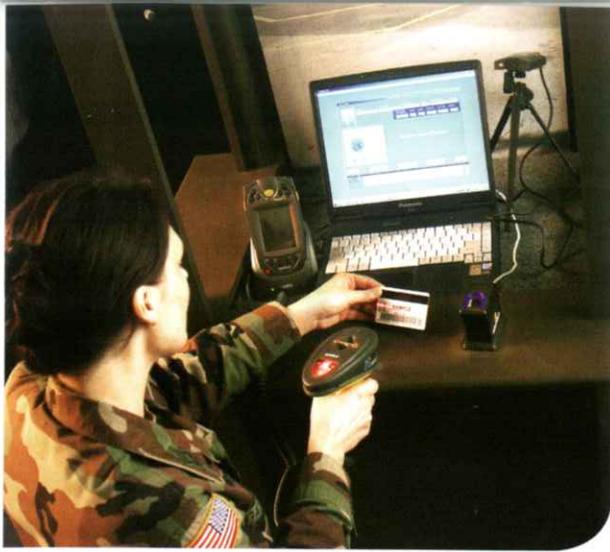
**A Multi-National Force—Iraq personnel collect biometrics to verify and validate identities.**

Center, September 11, 2001. Prior to 9/11, application of biometrics was directed as an information assurance tool. Currently, biometrics function as a force protection tool and as a personal identification attribute in the Global War on Terrorism. In the latter role, biometrics have become mission essential information for warfighters to gather from detainees and others when operating in the field. Our warfighters are stepping up their efforts to collect high-quality biometrics and to learn how biometrics can be used to protect them and their comrades.

After seeing how successful biometrics are in the force protection role, other DoD commands are embracing its use in other roles. One new role is in business applications such as the E-Security system for the Military Enlistment Processing Command. When a person chooses to enlist and enter the accession process, fingerprints and a digital photograph will be taken to identify that person throughout the military entrance activities. The E-Security system



**Samuel J. Cava**



a contract to build eight BISA systems for shipment to the Southwest Asia theater of operations. Azimuth, as a small, veteran-owned business, worked closely with a number of partners to deliver these very complex systems over six months, from start to finish. BISA units are now operational at several locations in Southwest Asia.

**Q. What other programs can you point to that impacted West Virginia's standing as a center for biometrics?**

**Multi-factor identification uses something you have, an identity card and something you are (biometric), to positively identify a person prior to base access.**

will verify that the same person who initially entered is the same person who takes the qualification and physical training tests. This verification will help ensure that our military keeps its standing as the best in the world.

Another trend is to develop automatic, computer-driven methods to fuse or combine, multimodal biometrics with other data to produce a more detailed picture of the person being investigated. By linking disparate types of biometrics, such as fingerprints with iris and facial imagery, users increase the probability that the person whom they have in custody can be identified positively through the comparison of biometrics.

**Q. Describe BISA as it matured through the pilot method.**

A. The Biometric Identification System for Access moved rapidly from a concept outlining the goals to a working prototype and then to a product now in operation. Computer Sciences Corporation, the BFC's prime contractor, transitioned BISA from prototype to a fielded product.

The BFC team demonstrated a prototype biometric collection and personnel badging system for use in theaters of operation within 35 days after the joint staff directorate initiated the program for Anti-Terrorism and Homeland Defense. The prototype showed the possibilities of collecting biometrics from Iraqi nationals applying for positions on protected compounds and then comparing them against those in the Automated Biometric Identification System.

After fielding two systems for test and evaluation, CSC, SRA, and Azimuth Inc., of Morgantown, West Virginia won

A. The first that comes to mind is the Automated Biometric Identification System. Leveraging lessons learned from the Federal Bureau of Investigation (FBI) Criminal Justice Information Services in Clarksburg, DoD Biometrics has developed the Automated Biometric Identification System (ABIS). The ABIS helps assure that biometric data collected from a Red Force member—an enemy combatant or similar national security threat—gets searched against all relevant databases. The ABIS is another tool assisting the military identify friend from foe by linking an individual to any previously used identities or past recorded actions.

Managed by the BFC, the ABIS currently focuses on fingerprints with future plans to incorporate other biometric technologies such as facial geometry and iris patterns. The BFC works with relevant DoD organizations to meet their specific needs relating to biometric data transmission, searching and match notification in their use of the ABIS.

Complementing the BFC ABIS management staff is the team Lockheed Martin Corporation put into place after it won a contract to build, operate and maintain the ABIS. Lockheed Martin has about 40 employees supporting the effort in Fairmont and Clarksburg. The ABIS is housed on the FBI's CJIS campus.

**Q. Are there any future pilot programs that might achieve similar success as the BISA and ABIS?**

A. Yes, one program is the Maritime Interdiction Operation pilot we are working on with the U.S. Navy. Our staff members have gone on board Navy ships twice within the past months to assist in a demonstration on collection of biometrics using portable devices. The demonstrations have shown that Navy boarding parties can collect biometrics

**Fingerprints collected on 10-print cards can be scanned to populate biometric databases.**

from individuals on suspect ships and then transmit the information via wireless communications for subsequent transmittal to the US for checking against the ABIS database. There is still much to be done, both on system configuration and policy development, before the Navy begins to collect biometrics from individuals on ships it interdicts at sea.

**Q. How does the BFC serve as an economic engine in West Virginia?**

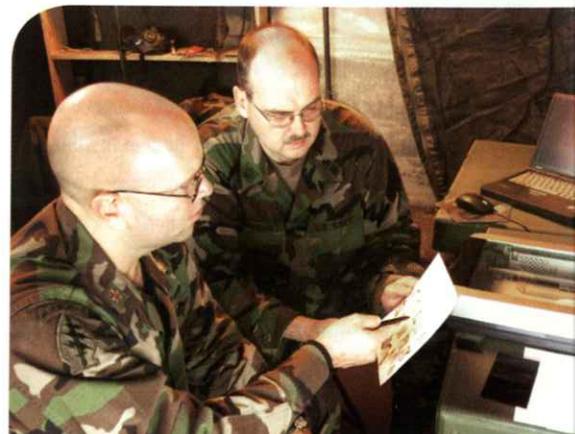
A. In addition to our other mission-oriented roles, the BFC serves as a technology incubator in a very broad sense of the definition. We develop biometric pilot programs for implementation throughout DoD. If a pilot program's technological solution meets the needs of the DoD command with whom we are working, then it could be transitioned to a commercial business to bring the concept to market.

The BFC funds the West Virginia University Biometrics Studies Program to conduct basic research and development applicable to DoD mission-oriented programs. The intellectual property created can lead to entrepreneurial growth and attract venture capital.

**Q. What are your thoughts on the biometrics industry as a whole?**

A. The biometrics industry has many smart and aggressive people leading it. As a young industry, the members enjoy a market that is waiting to be served with the next best innovation, and there are many possible directions to take. In addition to fingerprint and iris biometric templates, companies are researching palm and finger vein geometry, ear geometry, a person's scent and other unique personal identifiers. The innovative methods are being developed in the US and across the globe.

At the Biometric Consortium Conference (held in September in Arlington, Virginia.) we challenged the industry with what our needs were in solving the lessons learned from the Global War on Terrorism. Specifically, biometric devices are moving toward man portable



## Moving Mountains

"The Global War on Terrorism needed biometrics to help determine who was good, who was bad and on which side the guys in the middle belonged. The Biometrics Fusion Center has led this effort as the lead technology innovator and the strategic operational center for DoD Biometrics. As a former Air Force officer, I knew that to make our center grow we needed to identify and proactively develop solutions for users within the military community by employing the most advanced biometric techniques in the world," says Samuel J. Cava, Biometrics Fusion Center director.

This West Virginian native chose an entrepreneurial mindset to take on these new challenges and insisted the ever-

growing staff follow a forward-thinking business mantra. The BFC's staff began an aggressive business development outreach strategy and utilized its strengths of ingenuity, partnerships with industry and academia, relationships within the military community and just plain hard work.

Under Cava's leadership, the BFC has more than tripled its staff in West Virginia. Additionally, the BFC will manage a like number of staff in assignments overseas. Plus, it is managing several key biometric programs for the Department of Defense. Two programs—the DoD Automated Biometric Identification System and the Biometric Identification System for

Access—serve as biometric technology leaders within DoD and gave opportunities to several small businesses. The BFC supports its customers with 24/7 operations and plans continued growth through the development of other DoD biometric pilot programs.

"Sam Cava is largely responsible for turning the center from a hardware/software test and evaluation facility to a powerful economic engine and an important player in the war on terrorism," says John D. Weete, vice president research and economic development at West Virginia University, a nationally recognized biometric research university. ☺

devices, powered with batteries or other means and able to transmit collected data in austere locations.

### Q. What important issues must biometrics overcome to increase use throughout society?

A. Biometric providers are beginning to understand the importance of working to standards and building products that operate in a plug-and-play environment. When standards are published and accepted, then biometrics will achieve the interoperability, or user-friendly operation, we expect from computer-based systems. Interoperability will allow all users to efficiently and effectively deploy biometrics in many settings without concern for special hardware interfaces, proprietary software code, and other unique techniques that keep the "user-friendly" tag from being applied to biometrics.

### Q. Where does the BFC fit within the DoD?

A. The Department of Defense (DoD) Biometrics is responsible for leading, consolidating and coordinating biometric activities for the DoD. DoD Biometrics has two main organizational components:

- ▼ The Biometrics Management Office (BMO), Arlington, Virginia, coordinates policy, standards and enterprise architecture development.
- ▼ The Biometrics Fusion Center (BFC) conducts testing and evaluation, provides repository management services and provides implementation guidance.

These components report to the Army's Chief Integration Office, a command within the Army's Chief Information Office (CIO/G-6). The chief information officer acts on

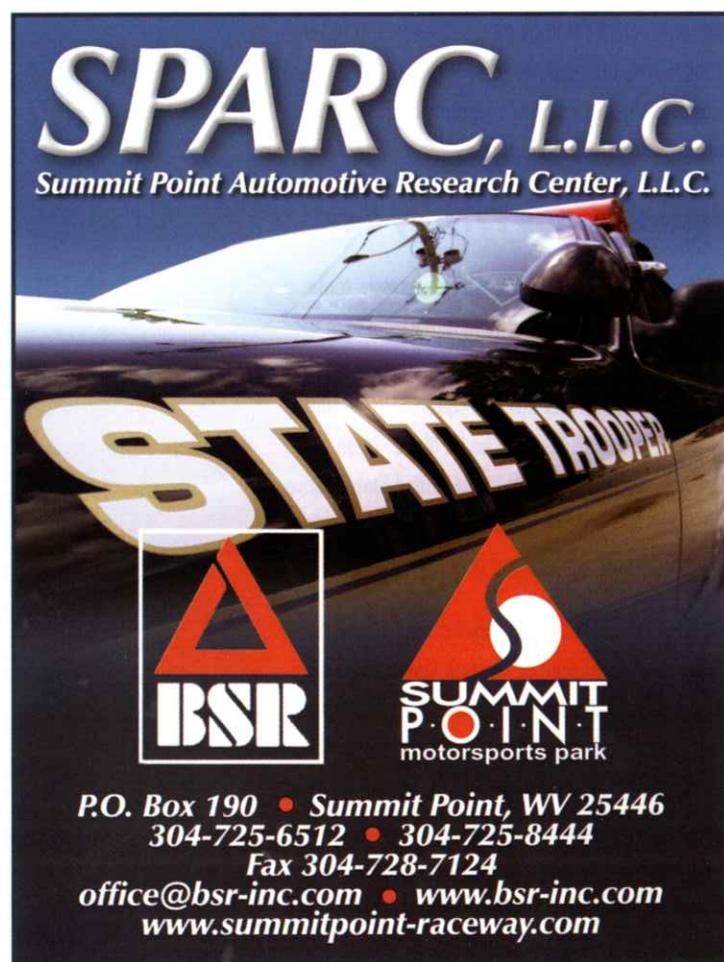
behalf of the DoD executive agent for biometrics, the secretary of the army. The recently formed Identity Protection and Management Senior Coordinating Group provides senior-level, DoD-wide strategic guidance to DoD Biometrics and the BFC on a number of missions.

### Q. Recent news reports indicated that the BFC would move to a new facility on the FBI's Criminal Justice Information Services Division campus. What are your thoughts on that?

A. Keeping the BFC in Clarksburg points to the success we have had across the board in terms of managing and executing programs, attracting talented professionals and the emerging technology businesses that are located along the I-79 corridor.

The Keeley Building in Clarksburg has served us well since July 2004. It is projected

that we would outgrow the space as our staff increases, and our technology needs could overburden the infrastructure that is available. Our people enjoy the bustle of being part of a downtown and the amenities that it provides, but fulfilling our Department of Defense mission is our primary focus and the proposed location would allow us to better serve the nation's warfighters. ☺



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