

About the CEO

Dr. Russell Davis has a Doctor of Science, Applied Scientist, and Master of Science degrees in Computer Science from the George Washington University. He also earned his Bachelor of Science in Computer Engineering from Florida Tech. In addition to over 25 years experience working Information Technology Security. Dr. Davis was the Logical Access project manager at the Bureau of Land Management. During a four month period, the number of government credentials issued went from approximate 200 to over 5500. Issuing digital credentials via an approved SSP provides customers valuable experience.

In 1988, Dr. Davis published a paper, *Exploring Computer Viruses*. At the time, many working the security industry argued that viruses were mere curiosities and would never amount to a serious security threat. In 1990, Dr. Davis co-authored a paper, *Security Processor Interface*, that argued the need for an isolated security device. The PIV card is such a control to meet this need. Femtosecond Inc. can provide the strategic vision and planning necessary for evolving technology.

Femtosecond Inc.

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Technology Advances Necessitate Creative Security

9747 Water Oak Drive
Fairfax, VA
22031

Phone: 703 282-1837
Web: www.femto-second.com
E-mail: rdavis@femto-second.com



Professional Services Information

*Technology
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Creative Security*

Femtosecond Inc.

Our products are
knowledge and
experience

The Current Landscape

Forward

Femtosecond Inc. was established to help Federal and State governments lower security costs by encouraging commonality. In particular, Homeland Security Presidential Directive 12 ([HSPD-12](#)) and the National Intelligence Reform Act (NIRA) separately require common identification.

Approach

Our approach is to help Federal and State government meet common identification requirements by utilizing the infrastructure and technology funded by the Federal government in meeting HSPD-12. NIRA requires the Department of Transportation to establish a common driver's license while HSPD-12 requires a common identity verification card.

Femtosecond Inc. tracks efforts where a common identification technology could benefit from Federally funded efforts. For example, H.R. 418, if approved, will require minimum standards for issuing a driver's license. On the surface, this is a similar issue addressed by the Federal Information Processing Standards (FIPS) 201, *Personal Identity Verification* (PIV). The PIV standard specifies a common card and supporting infrastructure that could easily be extended and provide a cost effective control for States to use.

Femtosecond Inc. can provide knowledge of the Federal activities and help utilize the work done at the Federal level. By combining the



Federal and State efforts, Femtosecond Inc. hopes customers realize a single homogeneous security approach. A combined approach will enable strong controls that can reduce the impact of identity theft.

Registration Authority

HSPD-12 Specific

Digitally signed badge holder information must be included on the PIV card. The digital signatures must be created consistent with Federal Public Key Infrastructure (PKI) requirements. A PKI includes a Certification Authority, Registration Authorities, and a directory. HSPD-12



Rack Mounted Certification authority

encourages digital certificate issuance by Shared Service Providers (SSP). By integrating the cryptographic functions available through the smartcard badge, integrity and confidentiality

can be enhanced. Femtosecond Inc. can assist in strategic planning and coordinating



Rack Mounted X.500 Directory

the FIPS 201 requirements into Information Technology environments.

What is a Femtosecond?

A Femtosecond is one quadrillionth of a second and represents how new technology will be measured. It highlights the fact that technology is advancing and with it, a complex changing challenge for ensuring security. The advances in technology can work to our advantage or detriment, depending on our ability to adapt quickly and communize on solutions.

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