

BUSINESS

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New smart card can hold a Web server

■ U-M, Schlumberger stress security in new system.

By COLLEEN NEWVINE
NEWS BUSINESS EDITOR

Security on the World Wide Web is becoming a greater concern as companies and individuals transmit more sensitive data, from credit card numbers to medical records, using the Internet.

But those curious about that confidential data can't get at it if the information is physically removed from an accessible spot — say, in a wallet.

The University of Michigan's Center for Information Technology Integration and Schlumberger, a provider of smart card-based technology, announced Wednesday that they have developed a Web server that runs on a smart card.

A smart card resembles a credit card, and contains a small computer capable of storing information such as account numbers, emergency health information

and cryptographic keys. It also can stand in for money.

Security was a main goal in developing the smart card Web server, said Peter Honeyman, director of the center and project leader in its research partnership with Schlumberger.

"It's a technique for providing extra security for a Web server," he said. "It's really difficult to break into a smart card."

Smart cards don't have screens or keyboards, making it difficult to interact with them. CITI has card readers on each of its computers, enabling users to get access to the cards' information. Take the card out and it's no longer available to anyone and it's secure, Honeyman said.

Additional work is focusing on ways to give users easier access to their personal smart card Web servers, such as using a Palm Pilot to read them, he said.

U-M students and employees all have smart cards, as the M Card that serves as identification can carry additional in-

formation, such as having money stored on it to function as a debit card. Honeyman said the M Card's five-year contract is due to expire at the end of this year, and he hopes to see the program modified to allow students to carry around information on a personal Web server.

Jim Rees, chief technologist at CITI, implemented the Web server on Schlumberger's commercially available Cyberflex Access, the first Java-based smart card. The server was written in the Java programming language and uses a subset of the TCP/IP communication protocol, which is common in today's Internet applications.

The ability to run Java on the smart card made the project easier, Rees said in a written statement from U-M. "Java offers a standard development environment that is infinitely easier to use than that of the traditional smart card."

The U-M center's Web site is www.citi.umich.edu/ and Schlumberger offers more information about the project at www.slb.com/smartcards.

Local jobless rate still state's lowest

FROM NEWS STAFF REPORTS

Washtenaw and Livingston counties again have the lowest unemployment rate in the state, reporting just 1.6 percent of the labor force without work in September, according to a Wednesday report from the Michigan Department of Career Development.

The Ann Arbor Metropolitan Statistical Area posted the lowest jobless figures among the state's 12 MSAs, with a rate of 1.8 percent. Included in the MSA are Washtenaw, Livingston and Lenawee counties. Lenawee County had 2.7 percent unemployment for September, ranking it 63rd among the state's 83 counties, from highest to lowest.

The Ann Arbor MSA rate climbed slightly from August's 1.7 percent, but was down from 2.2 percent in September 1998.

Unemployment rates increased slightly in 10 of the state's 12 major labor market areas. Meanwhile, labor force levels also decreased as students returned to school.

Statewide, unemployment increased from 2.9 percent in August to 3 percent in September. That's as compared to 3.4 percent a year ago.

Growth