Forensic Computers, Inc.

Tableau TACC1441 Hardware Accelerator

Click here for hi-res photo

Part #: TACC1441i *(internal)*
TACC1441e *(external)*

see chart below for pricing

One Year Warranty

Specifications

The TAC1441 Hardware Accelerator is the latest innovation by Tableau. "Designed to accelerate the dictionary-based attacks of leading password recovery applications such as AccessData's Password Recovery Toolkit (PRTK) and Distributed Network Attack (DNA)", the TAC1441 **actually increases decryption up to 60 times** that of non-accelerated systems.

The TACC1441 comes in two varieties: internal (TACC1441i) and external (TACC1441e). The external TACC1441 includes: a TP2 power supply, a TC7-9-9 FireWire cable, a TCA7-4-9 FireWire adapter and a TCA7-6-9 FireWire adapter.

Field-Programmable Gate Array (FPGA)-based hardware

The TACC1441 is massively parallel and re-configurable; (i.e.) the TACC1441 uses many processors simultaneously to attack password protected or encrypted files. The TACC1441 can re-configure itself based on the type of password problem being passed to it from PRTK or DNA. The Firmware for the TACC1441 is updatable in the field like other Tableau products.

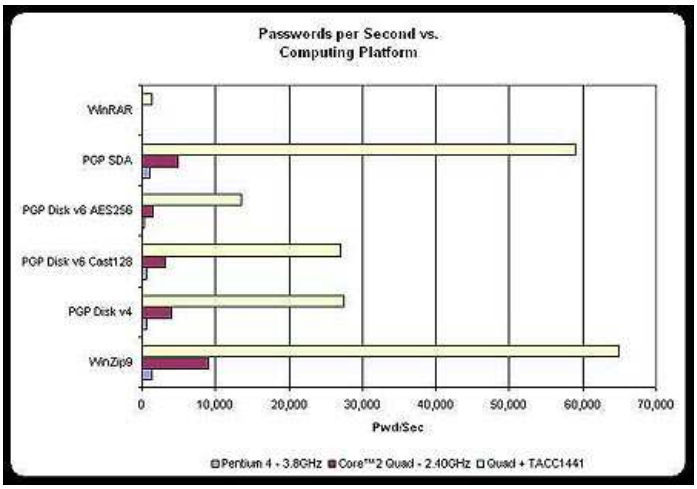
Internal or external mounting

- Built in to forensic workstations
- Built in to server racks
- Standalone portable unit *(Table-top, fully enclosed & ventilated)*

Current Decryption Support

- WinZip9
- WinRAR
- PGP SDA
- PGP Disk v4
- PGP Disk v6 AES256
- PGP Disk v6 Cast 128
- PGP Message SHA-1

Benchmark Performance Testing
Single TACC solutions: 6x to 30x performance gains



Export License Requirements

TACC1441 has been classified as a *cryptanalytic* product by the US Dept of Commerce and National Security Agency. Export restrictions apply.

For Single Installations with current PRTK/DNA License	
TACC1441i *(internal)* **for existing** Access Data PRTK or DNA installations 	MSRP: $4,245.00 **Forensic Computers, Inc.: $3,820.00**
TACC1441e *(external)* **for existing** Access Data PRTK or DNA installations *Includes a Pelican 1450 case* 	MSRP: $4,245.00 **Forensic Computers, Inc.: $3,820.00**
For Single Installations without PRTK/DNA License	
TACC1441i **with purchase** of Access Data PRTK license 	*$3,820.00 + (PRTK) $595.00 =* **$4,415.00**
TACC1441i **with purchase** of Access Data DNA-50 client license	*$3,820.00 + (DNA-50)*

	*$1,495* = **$5,315.00**

 Request Quotes Email: info@forensic-computers.com
PH: 1.540.726.9530 FAX: 1.540.726.9533 Toll Free: 1.877.877.4224 Site Map

TACC

Tableau Accelerator Installation
25 January 2008

ACCESSDATA, ON YOUR RADAR

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Preface

In cooperation with AccessData Corp.®, Tableau* has developed a set of programmable hardware units, the Tableau Accelerator (TACC) units, a Field-Programmable Gate Array (FPGA), to increase the speed and facilitate the cracking of complex password algorithms.

The TACC1441 Hardware Accelerator is the latest innovation. Designed to accelerate the dictionary-based attacks of leading password recovery applications, such as AccessData's Password Recovery Toolkit (PRTK) and Distributed Network Attack (DNA), the TACC1441 increases decryption up to 60 times of non-accelerated systems.

The system supports password cracking for the following seven file types:

- WinZip9
- WinRAR
- PGP SDA
- PGP Disk v4
- PGP Disk v6 AES256
- PGP Disk v6 Cast 128
- PGP Message SHA-1

This document details how to install the hardware and software for these units in conjunction with AccessData's password cracking programs. TACC licensing is required for DNA 3.3.1 and PRTK 6.3.1.

The TACC1441 comes in two varieties: internal (TACC1441i) and external (TACC1441e). They include a TP2 power supply, a TC7-9-9 FireWire cable, a TCA7-4-9 FireWire adapter and a TCA7-6-9 FireWire adapter.

FPGA-based Hardware

The TACC1441 uses many processors simultaneously to attack password protected or encrypted files making it massively parallel and re-configurable. It can re-configure itself based on the type of password problem being passed to it from PRTK or DNA.

The Firmware for the TACC1441 is updatable in the field, as are other Tableau products.

Internal or External Mounting

- Built in to forensic workstations
- Built in to server racks
- Standalone portable unit (table-top, fully enclosed & ventilated)

Prerequisites

- AccessData Dongle drivers must be installed
- Licensing for DNA/PRTK, with accompanying TACC License
- DNA 3.3.1 or PRTK 6.3.1 must be installed and functioning

Installation

Use the latest shipping version of DNA/PRTK. Previously installed versions may not contain the necessary modules, algorithms and drivers for DNA/PRTK to use a TACC unit.

To install the TACC unit:

1. Connect the TACC unit using the appropriate cables. Choose between FireWire 800 or FireWire 400, using the cables provide with your TACC unit.
2. Connect the TACC unit's external power source directly to the TACC unit using the power cables provided with the unit.

3. Attach the TACC unit to a computer using DNA/PRTK. Once connected and turned on, the two green LEDs on the TACC unit (power, host det) illuminate.

   Confirm the TACC connection to the operating system by clicking the hardware removal icon in the task bar which should display the TACC in your list of available devices.

   Note: For the updated Office 2007 module, verify that the OfficeGrunt.dll located in the c:\program files\accessdata\ *main folder* \modules folder is later than 11/19/07.

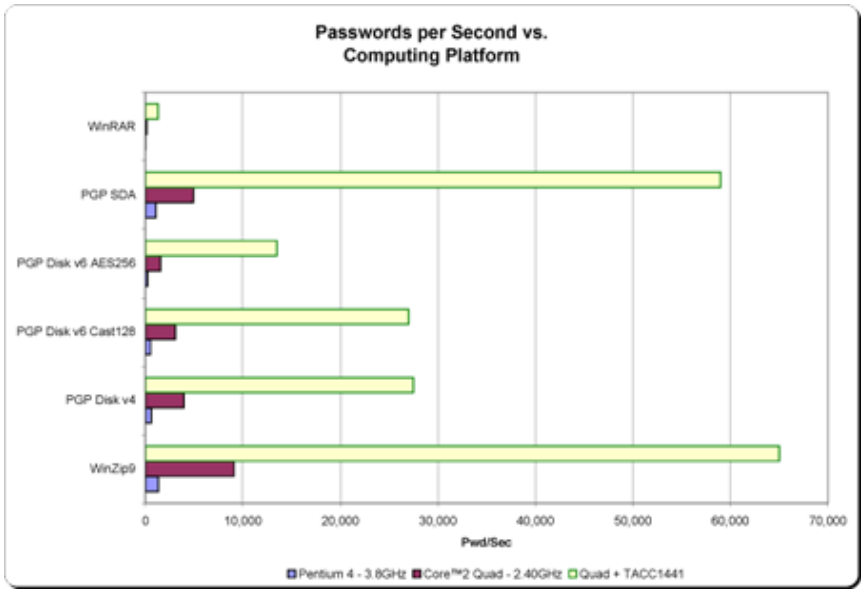
4. Once attached, add a supported file job in DNA/PRTK, following the prompts. DNA/PRTK indicates when it pushes a job to the TACC unit for processing. For more information on adding a file job in DNA/PRTK, see the users' guide: http://www.accessdata.com/common/pagedetail.aspx?PageCode=downloads .

   The Busy display LED will flicker as packets are being processed, depending on the module being processed.

Additional Information

Tableau's TACC1441 sets the new standard in password recovery performance. Working in conjunction with software from the established leader in password recovery, AccessData, Tableau's TACC1441 delivers unprecedented password attack rates.

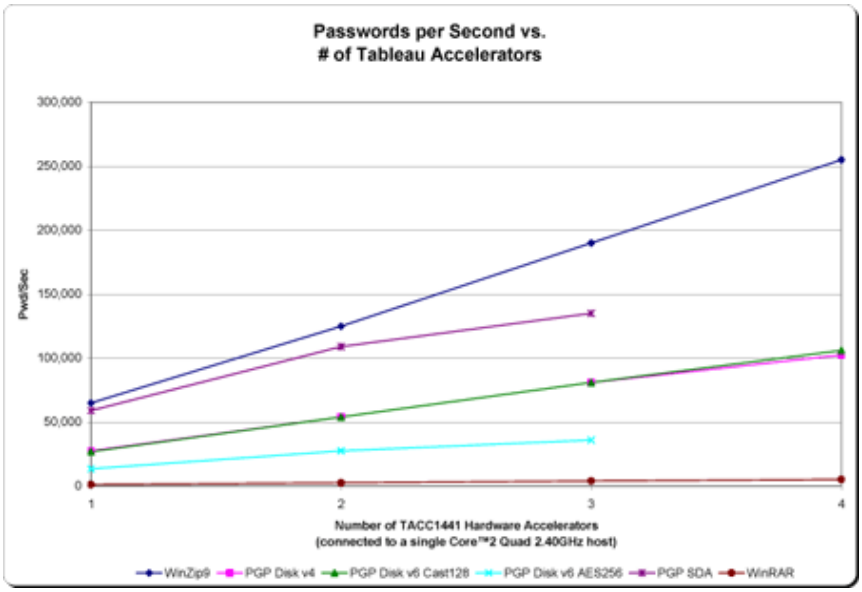
The chart below graphs passwords-per-second when running PRTK on three different platforms: a common Pentium IV, a brand-new Intel Core2 Quad Core, and the same Quad Core with one TACC1441 accelerator.



WinRAR, PGP, and WinZip are widely used file formats which present enormous challenges for password recovery software running on traditional processing platforms. As the chart shows, the TACC1441 accelerates each of these algorithms by a factor of 6x - 30x, compared to the un-accelerated processors. For even faster performance than the gain offered by a single TACC1441, use multiple TACC1441 units together on a single computer.

Password per Second versus Multiple TACC Units

The next chart illustrates the benefit of using multiple Tableau TACC1441 accelerators with a single host computer; in this case, a Pentium Core2 Quad Core. For each additional TACC1441 unit there is roughly a linear increase in performance for many widely used encrypted file formats, such as WinZip and PGP. In certain cases, the benefits extend even to file formats like WinRAR!



Dictionary-based password attacks, like WinZip, process at rates of 1,000 - 3,000 passwords per second on Pentium IV computers, allowing approximately 20k+ passwords per second on a mid-size DNA cluster. A single CPUs with four TACC1441 accelerators runs in excess of 250,000 passwords per second!

Trouble Shooting Tips:

If you have trouble installing your TACC unit, check these tips:

- Verify the following files are placed in the correct folders:
- For DNA/PRTK the files are listed under the main folders: DNA=\DNA 3\Supervisor, PRTK=\PRTK6 = '*main folder'*
- c:\program files\accessdata\ *main folder* \modules\tacc\ folder: taccapi.dll/
- c:\program files\accessdata\ *main folder* \modules\tacc\algorithms\ folder: taccAlgPGPDisk4.dll, taccAlgPGPDisk6.dll, taccAlgPGPMsgSHA1.dll, taccAlgPGPSDA.dll, taccAlgWinRAR.dll and taccAlgWinZIP.dll.

To install the module for office 2007 for use with a TACC unit with DNA version 3.3.1 or PRTK 6.3.1 do the following:

- Replace the OfficeGrunt.dll in the:
  - c:\program files\accessdata\PRTK 6\modules for PRTK
- or
  - c:\program files\accessdata\DNA 3\Supervisor\modules for DNA

- Copy the taccAlg_Office2007_9_1_0090.dll into:
  - c:\program files\accessdata\PRTK 6\modules\tacc\algorithms\ folder for PRTK
- or
  - c:\program files\accessdata\DNA 3\Supervisor\modules\tacc\algorithms\ folder for DNA