a cura di: **Gerardo de Eccher - brugola.x - 18-02-2009 00:00**

Rivatuner 2.23

LINK (https://www.nexthardware.com/download/diagnostiche/160/rivatuner-223.htm)

Utility per il tweak e la diagnostica delle schede video

- Fixed abnormal negative VRM temperature reading for temperatures above 128↔°C in VT1103 plugin.
- Data sources is no loner erroneously displayed twice in the list of data sources in hardware monitoring history setup window after disabling data source, enabling it and pressing "Defaults" button.
- Data source setup button is no longer grayed in hardware monitoring history setup window when localized GUI is selected.
- Localization database host resize tokens are no longer ignored in hardware monitoring history setup window when localized GUI is selected.
- Fixed bug in hardware monitoring log file viewer causing empty graphs to be displayed when opening multi-GPU log file on single-GPU system.
- Fixed idle memory clock frequency detection for G9x GPU based systems supporting memory clock frequency generator switching to PCIE bus clock (e.g. GeForce 9800GTX+ series display adapters).
- Minor localization and GUI fixes.

What's new:

- Added ForceWare 182.xx drivers family support.
- Updated databases for Detonator and ForceWare drivers. Added databases for ForceWare 181.20, 181.22 and 182.05.
- Added Catalyst 9.1 drivers family detection.
- Updated PCI DeviceID database for NVIDIA display adapters.
- Added reference fan duty cycle monitoring and low-level fan control tab for G92 based display adapters using integrated on-die fan controller (e.g. GeForce 9800GTX series). Please take a note that low-level fan control tab for display adapters using integrated fan controller is provided only as a workaround allowing you to control the fan if the drivers are completely unable to do it. It is strongly not recommended to use low-level fan control for integrated fan controllers if driver-level fan control functions properly.
- Added heuristic driver version detection for unattached display devices (for example the secondary GPUs in SLI/Crossfire mode invisible to OS) under Windows Vista.
- Improved driver-level overclocking and fan control for NVIDIA multi-GPU systems. Thanks to Jacob Freeman @ EVGA for providing GeForce 9600GT SLI system for new features development and debugging. Multi-GPU related improvements include:
    - Added optional independent driver-level overclocking and fan control support for display adapters working in SLI mode. Now RivaTuner provides independent driver-level overclocking and fan control by default for the secondary GPUs in SLI configuration. Driver-level overclocking and fan control on the primary GPU is still mirrored to all secondary GPUs joined into SLI configuration, however this behavior can be disabled via NVAPIMultiGpuClockControl and NVAPIMultiGpuFanControl registry entries if completely independent control is needed.
    - Ability to overclock and control fan speed at driver level for display devices unattached to windows desktop (e.g. display adapters dedicated for PhysX acceleration).

- Improved hardware monitoring module:
    - New sticky graphs mode was designed special for multi-GPU systems and it greatly improves monitoring window layout and readability on the systems with many active hardware monitoring graphs, which cannot be displayed simultaneously without window scrolling. Now you can easily stick any hardware monitoring graph to other graph(s) and view multiple overlapping graphs on the master graph. The groups of sticky graphs can be easily edited on-the-fly in both manual and automatic modes, dynamic master graph selection allows you to switch between multiple vertical scaling modes for any sticky graphs group. The following sticky graphs related GUI enhancements are available in this version:
        - Added "Stick to other graph" button to the system area of each hardware monitoring graph. You may click this button on any graph you're about to stick to other graph(s) then point desired target graph(s) to manually create groups of sticky graphs with just two mouse clicks.
        - Each graph (for both normal and clipped states) and grid color can be customized in the graph properties now. Custom colors are useful for visual color identification of graphs in a group.
        - Added master graph selection tabs to each group of sticky graphs. Master graph selection affects graphs Z-order and ensures that the master is rendered on top of all graphs in the group, as well as it affects group vertical scaling and grid color settings. Current and tracking marker values also apply to the master.
        - Added "Unstick graph from group" button to the system area of each group of sticky graphs. You may click this button to unstick master graph from the group. You may also hold when clicking this button to unstick all graphs from the group and hold + to unstick all graphs from all groups.
        - Added "Auto stick graphs" button to hardware monitoring window toolbar for both realtime monitoring and postreal monitoring history viewing modes. You may click this button to activate wizard allowing you to create the groups of sticky graphs automatically. The following automatic modes are available:
            - "Stick by graph units" - groups of sticky graphs are created by graph units similarity. In this mode wizard creates group of sticky graphs with all temperatures in ↔°C units, group of sticky graphs with all clock frequencies in MHz units and so on.
            - "Stick by graph name on multi-GPU systems" - groups of sticky graphs are created by multi-GPU graph names similarity. In this mode wizard creates group of sticky graphs with core temperatures for all GPUs in the system, group of sticky graphs with core clocks for all GPUs in the system and so on.
    - Improved print friendly monitoring graphs screenshot capture:
        - Now besides previously available F11 keyboard shortcut print friendly screen capture can be also performed by pressing new "Capture print friendly screenshot" button on hardware monitoring window toolbar for both realtime monitoring and postreal monitoring history viewing modes.
        - Legend is now displayed on print friendly screenshots for the groups of sticky graphs.
        - Current tracking marker no longer displayed on print friendly screenshots.
    - Improved hardware monitoring plugin API. Now GPU index is passed to API SetupSource function allowing plugin developers to implement GPU specific hardware monitoring settings customization.
- Updated bundled RivaTunerStatisticsServer v3.1.0 utility:
    - Minor skin appearance changes, "Normal" application detection level has been renamed to "Low" for better understanding.
    - Improved hooking system injects code into OS kernel's LoadLibrary functions by precached offsets and improves compatibility with some protective systems, faking the real LoadLibrary function offsets (e.g. latest revisions of SecuRom coming with new games like Dead Space, Need for speed : Undercover etc). Now such games no longer crash on startup when the server is running and LoadLibrary hooking is enabled by selecting "High" application detection level.
    - Added pre-created profiles for 3D, which require non-standard On-Screen Display coordinate space settings (e.g. Codename Panzers : Phase Two and Alpha Prime).
    - Added pre-created profiles for new pseudo-3D applications.
- Updated bundled D3DOverrider v2.0.0 utility:

- Fully redesigned user interface:
  - Now D3DOverrider follows by RivaTunerStatisticsServer and also supports user interface skins. User interface skinning usage approach allows RivaTuner fans community to change D3DOverrider's appearance completely and to express themselves in new skins design. Skin format is completely open, skin compiler and decompiler are integrated in D3DOverrider, so please visit techsupport forums to get more detailed information and help on the skin creation.
  - Simplified beginner oriented profile settings. Many previously available power user oriented options, such as per-3D API triple buffering and VSync forcing options, are now merged into unified options and more simple multi-buttons, e.g. "Application detection level" multi-button.
  - Improved help system. Now context sensitive help system is activated by hovering mouse over the control, instead of traditional right-click and "What's this?" based access in the previous versions.
- Fully redesigned profiles architecture:
  - Now pre-created and user profiles are no longer stored into single file, so user profiles are no longer lost after D3DOverrider reinstallation. Please take a note, that the user profiles are preserved only when D3DOverrider is reinstalled in the same folder.
  - Now it is no longer possible to remove critically important pre-created profiles and pre-created profile settings can be easily restored due to template based profiles architecture.
  - Previously available debug features (sound indication and RivaTuner events logging) can be controlled via profile GUI now.
- Greatly improved triple buffering forcing safety. Now D3DOverrider analyzes the application's 3D engine specifics and avoids forcing triple buffering for the applications, incompatible with triple buffering by design. Triple buffering is no longer forced under when the application is creating overlay swap chain or swap chain without hardware flipping support. This feature greatly reduces the need of adding new 3D applications to the exceptions list. Now most of such applications (e.g. different video players creating overlay swap chain or some games like Cryostasis, using D3DSWAPEFFECT_COPY swap chain) can start when D3DOverrider is running.
- Changed sound indication ideology. Now attempt to force triple buffering in the application having native triple buffering implementation is indicated by success beep instead of failure beep in the previous version. Failure beeps are now reserved for indicating triple buffering forcing failures due to specifics of 3D engine incompatible with triple buffering by design (please refer to the previous item description).
- Improved hooking system injects code into OS kernel's LoadLibrary functions by precached offsets and improves compatibility with some protective systems, faking the real LoadLibrary function offsets (e.g. latest revisions of SecuRom coming with new games like Dead Space, Need for speed : Undercover etc). Now such games no longer crash on startup when D3DOverrider is running and LoadLibrary hooking is enabled by selecting "Medium" or "High" application detection levels.
- Added power user oriented profile settings allowing D3DOverrider to disable injection into Direct3D device reset functions and prevent possible application crashing due to concurrent reset function hooking by D3DOverrider and game's own OSD implementation (e.g. crashing when changing display settings in Team Fortress 2 and D3DOverrider is running). Pre-created profile for Half-Life 2 engine based games demonstrates new setting usage.
- Updated exceptions list.

- Extended Direct3D9 capability bits decoding in low-level diagnostic report module.
- Improved command line interface. Added /SG and /SELECTGPU command line switches allowing selecting tweak target by GPU index rather than by logical display device index represended by previously available /SD and /SELECTDEVICE command line switches. New command line switches are supported for both queued hardware access scripts and for command line based GUI device selection changing.
- Added experimental display configuration tracking mode. Power users may enable this mode using DisplayConfigurationTracking registry entry to force RivaTuner to track changes in your display adapters configuration (e.g. toggling SLI mode on/off or disabling secondary display adapter in the device manager). RivaTuner will reinitialize logical devices list and restart hardware monitoring module on display configuration change.
- Minor GUI changes and improvements.