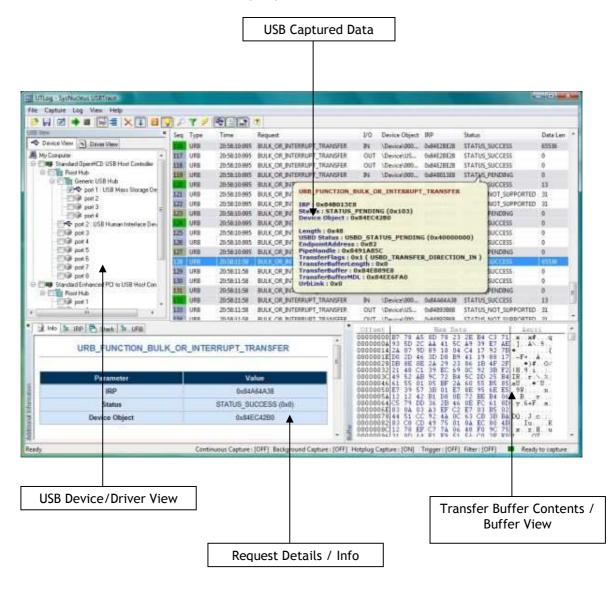# SysNucleus : USBTrace Datasheet

Introducing USBTrace

USBTrace is an easy to use and powerful USB analyzer. USBTrace can monitor USB transactions at host controllers, hubs and devices. This is a 100% software product. USBTrace supports Windows 2000, Windows XP, Windows 2003 Server and Windows Vista operating systems (both 32-bit and 64-bit) and works with USB 1.x and 2.0 (low, full and high speed) host controllers, hubs and devices.

USB Captured Data

USB Device/Driver View

Request Details / Info

Transfer Buffer Contents / Buffer View

Features and Benefits at a glance

- Captures USB 1.x and 2.0 (low, full and high speed) host controllers, hubs and devices.
- Easy to use yet powerful.
- Software based solution. Less expensive than hardware based analyzers.
- Complete Enumeration Monitoring.
- Supports USB device class decoding.
- Captured USB requests are decoded and displayed in readable format.
- Powerful search feature to analyze captured data.
- Powerful filter option to remove unwanted data.
- Continuous capturing for non stop device analysis.

- View as well as export detailed device information. Export device information as HTML or Text file.
- Export captured data as HTML, XML, text or CSV reports.
- Trigger functionality to stop capture operation at predefined conditions.
- Fully compatible with ACPI features.
- Displays valuable information for WDM device driver developers (URB, IRP, IO_STACK_LOCATION structures are decoded and displayed)
- Detailed Device Information (Device, Hub, Configuration, Interface, Endpoint Descriptors; Windows Enumeration Information)
- Performance statistics module for performance analysis.
- Background capturing for high performance capture sessions.

Usage scenarios

USBTrace is a very helpful development tool for the following scenarios:

1. USB device driver development & debugging
2. USB hardware development & debugging
3. USB device testing & troubleshooting

4. Reverse engineering the protocol of a USB device
5. Get detailed USB device information (USB descriptors, Enumeration info, etc)

The USBTrace Advantage

What makes USBTrace different from other similar products? What are the key benefits and advantages that you will receive while making USBTrace a part of your development toolkit? Read on..

1. **We do not use filter drivers. We help you see the entire device enumeration traffic.**

   USBTrace is one of those few USB monitoring tools which does not use filter drivers to capture USB traffic. The downside of using a filter driver is that the entire device enumeration cannot be captured.

2. **We offer device class decoding. So more decoded information for you.**

   USBTrace captures and decodes class specific requests for USB device classes like Video, Still Image Capture, Mass Storage, Bluetooth, Hub, HID etc. Moreover, if your device is implemented as a vendor-specific device, you can write your own class decoder plugins, so that you need not fiddle with the hex dump of data every time you analyze your device.

3. **You can capture USB activity at any layer, software or hardware.**

   USB data capture is not limited to devices. You can also capture at hubs and host controllers. If you are developing windows device drivers for your device, you might want to capture any one device object in your device stack. USBTrace allows you to capture any USB device object in the USB device stack.

4. **You can search and filter captured data with a lot of control.**

   You can perform search and filter operations based on the Status, Direction, Data presence & type of USB requests. You can also search the captured requests for a specified data pattern.

5. **USBTrace can export your captured data as HTML, XML, CSV or TEXT reports.**

Once you have completed a capture session, you might want to save the captured data. USBTrace allows you to save your captured data in a variety of forms. You can save your capture log in USBTrace native file format (*.ult) or you have the option to export the captured data as an HTML, XML, TEXT or CSV report. You can use the exported data to document the device behavior or share the device details with others.

6. **Continuous capture operation with trigger functionality.**

   Sometimes you need to monitor your devices continuously till a special condition is satisfied. For example, if your device is suspected to behave erroneously during prolonged operations, you can enable continuous capturing along with trigger functionality. Continuous capture simulates an infinite capture buffer. The trigger feature allows you to stop capture operation when a specific condition (For example: Failed Control Request) is satisfied. You can also enable background capturing so that the capture performance in improved.

7. **Performance statistics, in a different way.**

   The performance statistics feature of USBTrace is a post capture operation. You can view the performance statistics for any capture session, after the capture operation is stopped. You can see the performance counters even for previously saved captured data.

Customer Base

USBTrace's customer base consists of many of the most renowned technology companies around the world. Our customers come from a wide range of domains like Human Interface, Defense Technologies, Biometrics, Medical Devices, Security Systems, Motor Sport Simulation, Gaming Controls, Mobile Computing, Semiconductor Design, Home Entertainment, Educational etc. You can find below a partial list of our featured customers.
See http://www.sysnucleus.com/usbtrace_custlist.html

USBTrace Licensing

The following table shows the licenses we offer. If you need a license agreement which is not present in the table below, please contact us at sales@sysnucleus.com

No: of License	Unit Price in USD	Product ID
USBTrace Single User License	USD 195.00	300024144
USBTrace 2 to 3 Licenses	USD 180.00	300024144
USBTrace 4 to 6 Licenses	USD 165.00	300024144
USBTrace 7 to 9 Licenses	USD 150.00	300024144
USBTrace 10 or more Licenses	USD 140.00	300024144
USBTrace Company Site License	USD 1995.00	300076527

Visit http://www.sysnucleus.com/usbtrace_buy.html to order USBTrace online

USBTrace Support

We offer free support and free upgrades for a period of 1 year from the date of purchase.

About SysNucleus

At SysNucleus, we concentrate on developing device driver/system products and development tools. We give high priority for the quality of all products which goes out of our labs. Latest development tools and test procedures are used to ensure quality. We also undertake custom system component development.

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