Firehose Protocol V1.0

Definition Document

80-NG319-1 Rev. A

May 10, 2013

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Qualcomm Technologies, Inc.
5775 Morehouse Drive
San Diego, CA 92121
U.S.A.

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Revision history

Revision	Date	Description
A	May 2013	Initial release

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210.83.69.2

Contents

1 Background 6

1.1 Goals 6
1.2 Speed 6
1.3 Higher level programming 6
1.4 Compatibility with older and newer versions 7
1.5 Optional channel coding 7

2 Two Types of Packets 8

2.1 Raw data packet (raw binary data) 8
2.2 Plain text packets (XML files) 8

3 Commands (XML Files) 9

3.1 Command list in Firehose V1.0 9
3.2 Command NOP 9
3.3 Compatibility example 10
3.4 Sending multiple tags in a single file is not allowed 11
3.5 configure 11
3.6 program 13
3.7 getsha256digest 14
3.8 erase 16
3.9 setbootablestoragedrive 17
3.10 patch 17
3.11 setbootablestoragedrive 19
3.12 createstoragedrives – privileged instruction 19
3.13 power 19
3.14 benchmark 19

4 “Hello World” Example 20

4.1 “Hello World” example 20
4.2 High level “Hello World” transfer 20
4.3 Plain text level “Hello World” transfer 21
4.4 Channel level 22
4.5 Log tags 24
4.6 Logs as part of the response XML file 24
4.7 Logs as their own XML file 24

5 dummy.bin Example 25

5.1 Writing a large binary file 25

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6 What about file integrity/reliability? 28
6.1 Enable AckRawDataEveryNumPackets 28
6.2 Enable read_back_verify 29
6.3 AttemptRetry 29
6.4 AttemptRestart 29

7 Troubleshooting 30
7.1 SkipWrite 30
7.2 AlwaysValidate 30
7.3 <benchmark> 31

8 Validated Image Programming 32
8.1 Background 32
8.2 Validated image programming (VIP) 33
8.3 Simplest example – a single command 33
8.4 VIP block diagram 33
8.5 Hashing in action exercise 34
8.6 Table of digests 36
8.7 “Hello World” high level VIP 37

9 “Hello World” Example with VIP 38
9.1 “Hello World” example with VIP 38
9.2 Commands to be validated 39
9.2.1 configure 39
9.2.2 program 41
9.2.3 RAW DATA – “hello_world.txt” file contents 41
9.2.4 setbootablestoragedrive 42
9.2.5 power 43
9.3 Table of digests 43
9.4 How validated image programming works 43
9.5 HASH of the table of digests 44
9.6 Signing hello_TableOfDigests.bin 45
9.7 Detailed high level VIP “Hello World” 46
9.8 Packet/Hash number view of VIP “Hello World” 47
9.9 Digests in the first table limited to 54 (actually 53) 48

10 Memory Constraints 49
10.1 Example of chained hash tables 49
10.2 Implications of chained digest tables 51
10.3 Chained table example 52
10.4 Important notes on VIP 54

11 Detailed Logs 55
11.1 Transferring hello_world.txt (13 byte file) 55
11.2 Transferring dummy.bin (2MB file of zeros) 62
11.3 Transferring hello_world.txt with VIP 72

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11.4 Transferring dummy.bin with VIP 80

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1 Background

The Firehose protocol was created to replace Qualcomm®'s Streaming Download protocol. It is used primarily to program FLASH memory, but can be extended for other purposes. The programming application runs out of small internal memory, typically less than 256KB.

1.1 Goals

The Firehose protocol was created for:

- Speed
- Higher level programming
- Compatibility with older and newer versions
- Optionally, to add channel coding, such as framing, ECC, and compression (This is a feature that may be in a future release.)

1.2 Speed

Speed is achieved with the Firehose protocol by using the largest payload size available on a target's internal memory. Also, during file transfer, the Firehose protocol only needs to ACK or NAK after the entire file has been transferred and not after each packet is received.

1.3 Higher level programming

Instead of communicating with byte- or word-aligned commands, Firehose uses *plain text* which is not a fixed length. For example, with Streaming Download protocol a "hello" packet was a fixed size of 8 bytes. If a target received 9 bytes, this would be an error. With Firehose protocol a target or host does not expect a specific number of bytes for a particular command. Instead, plain text commands will be framed at a higher level.

NOTE: For the first release we have chosen XML as the plain text high level language to frame commands.

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1.4 Compatibility with older and newer versions

Using XML as the plain text language means the command structure looks as follows:

```
<?xml version="1.0" ?>
<data>
   <somecommand verbose=”true” />
</data>
```

Assume that the above command is a Version 1 packet and that a new *read-back-verify* attribute is added in Version 2:

```
<?xml version="1.0" ?>
<data>
   <somecommand verbose=”true” read-back-verify=”true” />
</data>
```

Firehose allows a sense of forward compatibility, since the Version 2 <somecommand> will not break a Version 1 target because the Firehose protocol will only extract the fields it is looking for from each plain text command. As a result, a Version 1 target will not be looking for the *read-back-verify* attribute and will not break as a result of it being there.

Thus, the term *forward compatibility* is used to mean that V1 packets can be sent to a V2 device and still work as intended. Likewise, V2 packets can be sent to a V1 device and still work without breaking it.

Tags and attributes are not case sensitive; thus, as shown below, both are acceptable.

```
<?xml version="1.0" ?>
<data>
   <SomeCommand Verbose=”true” />
</data>
```

```
<?xml version="1.0" ?>
<data>
   <somecommand vErBoSe=”true” />
</data>
```

1.5 Optional channel coding

Initially, it is assumed that the Firehose protocol will run over a reliable channel, such as USB. However, in a future release we may enable Firehose protocol to be compiled with optional channel framing, channel error control coding, channel compression, and channel encryption. This will be determined by demand.

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2 Two Types of Packets

There are two types of packets used in the Firehose protocol.

- Raw data packets (raw binary data)
- Plain text packets, chosen to be formatted as XML files (plain UTF-8 or UTF-16 text files)

2.1 Raw data packet (raw binary data)

Raw data packets are used for uploading and downloading data (file transfers). The structure of raw data packets is raw binary data with no framing or encoding.

The smallest packet size could be 1 byte, and the largest could be up to the maximum payload size allowed by the target (e.g., 16KB or larger). This packet can be 1 byte aligned. Examples of these raw packets are shown later (see also detailed logs in Chapter 11).

RAW BINARY DATA (length 1 byte to N)

2.2 Plain text packets (XML files)

All commands in Firehose are non-fixed length, plain text documents to be chosen by the user. For the first release we have chosen the industry standard XML file structure. An example of the XML file structure understood by Firehose is shown below.

```
<?xml version="1.0" ?>
<data>
   <tag attrib1=”value1” attrib2=”value2” />
</data>
```

NOTE: Due to memory limitations, this is the only XML file structure understood by Firehose.

We chose XML because of its many advantages, including:

- Industry standard and third-party support tools (i.e., parsers for validation)
- Plain text commands visible in the logs allowing for easy debugging, rather than command-based protocols where word-aligned integers (hex values) are difficult to parse by eye
- By design, XML files are extensible. This means that the Firehose protocol easily adapts to supporting new commands and/or ignoring deprecated or unrecognized commands
- By design, XML files support Unicode text (UTF-8 (ASCII) or UTF-16), allowing it the ability to be used in languages other than English

NOTE: For the first release we are only using ASCII (which is essentially UTF-8). Full UTF support is planned for a future release.

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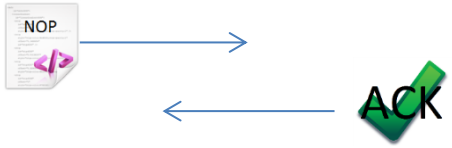
3 Commands (XML Files)

3.1 Command list in Firehose V1.0

Command	Sent by	Description
<nop>	Host	A dummy command that can be sent to the target, which is free to ACK or NAK
<configure>	Host	Used to define variables for reading/programming
<erase>	Host	Applicable to memory devices that support this command, such as eMMC User Partition
<program>	Host	Found in rawprogram.xml files, this command defines precisely where a file is to be programmed
<patch>	Host	Found in patch.xml files, this command is used to program individual bytes
<setbootablestoragedrive>	Host	Define which storage drive (Physical Partition) will be made bootable (i.e., active)
<createstoragedrives>	Host	Used to create general purposes partitions (GPP) also known as LUNs
<power>	Host	Control power of the target (i.e., reset)
<benchmark>	Host	Used to isolate and test specific features of the target in order to determine performance bottlenecks
<getsha256digest>	Host	Defines a range of FLASH memory for which to calculate a SHA256 hash. Allows verification of data written
This is a preliminary release; the commands are subject to change.		
<response>	Target	Used to ACK or NAK commands as well as return additional variables used for reading/programming
<log>	Target	Human readable messages

3.2 Command NOP

As an example, let us send a no operation <nop> command to the target. The target will respond with an ACK <response>.



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The XML format for both the <nop> command and <response> ACK are shown below. Notice that each is a complete XML file.

```
<?xml version="1.0" ?>
<data>
<nop value="ping" />
</data>
```

→

```
<?xml version="1.0" ?>
<data>
<response value="ACK" />
</data>
```

The XML data as seen on the channel has no special encoding and is shown below assuming UTF-8 (ASCII) encoding (59 bytes).

```
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31        <?xml version="1
2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 6E        .0" ?>.<data>.<n
6F 70 20 76 61 6C 75 65 3D 22 70 69 6E 67 22 20        op value="ping"
2F 3E 0A 3C 2F 64 61 74 61 3E 0A                       />.</data>.
```

Likewise, the ACK response would look like this (63 bytes).

```
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31        <?xml version="1
2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 72        .0" ?>.<data>.<r
65 73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41        esponse value="A
43 4B 22 20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A           CK" />.</data>.
```

Notice above that 0A is the "\n" (newline) character, which in ASCII view is represented by a "." (period); not to be confused with 2E, which actually is a "." (period) character.

3.3 Compatibility example

A main feature of Firehose is not having a fixed length frame. Below shows an additional attribute, "bob," added to the <nop> command. Any attributes not understood are simply ignored. **Attributes are not case sensitive.** Notice below the target responds the same.

```
<?xml version="1.0" ?>
<data>
<nop value="ping" bob="happy" />
</data>
```

→

```
<?xml version="1.0" ?>
<data>
<response value="ACK" />
</data>
```

The impact of this is significant because, as protocols grow to support more targets, many commands change. Thus, assuming the <nop> command in V2.0 adds the bob="happy" attribute, this V2.0 command can still be sent to a V1.0 target without any error and *will still work*. The only impact would be that the V1.0 target would not be able to take advantage of the V2.0 "bob" attribute.

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Likewise, the V1.0 <nop> command (without the bob="happy" attribute) can be sent to a V2.0 target and *will still work*. The only impact is the V2.0 target will have to rely on a default value for "bob."

3.4 Sending multiple tags in a single file is not allowed

An XML file allows you to send additional tags in a single file; however, for simplicity of the XML parser, we are not supporting this in Version 1.

```
<?xml version="1.0" ?>
<data>
<nop value="ping" />
<nop value="ping" />
</data>
```

NOTE: Due to memory limitations, the only XML file structure understood by Firehose is shown in Section 2.2.

3.5 configure

The <configure> command is used to retrieve and share information with the target. An important attribute is MaxPayloadSizeToTargetInBytes. In the <configure> command the host is informing the target of the payload size, in bytes, it intends to use. When the target responds, it is informing the host the maximum payload size it can handle. If the target can handle the payload size requested by the host, it will echo this value back.

```
<?xml version="1.0" ?>
<data>
<configure MaxPayloadSizeToTargetInBytes="8192" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<response value="ACK" MaxXMLSizeInBytes="2048"
MaxPayloadSizeToTargetInBytes="8192" />
</data>
```

If the target cannot handle the payload size requested, it will NAK the packet and reply with the largest value it can handle.

```
<?xml version="1.0" ?>
<data>
<configure MaxPayloadSizeToTargetInBytes="16384" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<response value="NAK" MaxXMLSizeInBytes="2048"
MaxPayloadSizeToTargetInBytes="8192" />
</data>
```


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If the host indicates a value smaller than one the target can handle, the target will still echo back the supplied MaxPayloadSizeToTargetInBytes (to indicate it has switched to this value), but it will also provide a MaxPayloadSizeToTargetInBytesSupported attribute. The host can then use this value in a second <configure> command as shown below.

```
<?xml version="1.0" ?>
<data>
<configure MaxPayloadSizeToTargetInBytes="1024" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<response value="ACK" MaxPayloadSizeToTargetInBytes="1024"
MaxPayloadSizeToTargetInBytesSupported="8192" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<configure MaxPayloadSizeToTargetInBytes="8192" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<response value="ACK" MaxPayloadSizeToTargetInBytes="8192"
MaxPayloadSizeToTargetInBytesSupported="8192" />
</data>
```

NOTE: MaxPayloadSizeToTargetInBytes must be a multiple of 512. Also, for good performance, it is highly recommended that it is not smaller than SECTOR_SIZE_IN_BYTES (found in rawprogram.xml files). Therefore, if SECTOR_SIZE_IN_BYTES is 4096 (4KB), it is recommended that MaxPayloadSizeToTargetInBytes is set to 4096, 8192, 16384, etc.

NOTE: In the case of Validated Image Programming (VIP) discussed in Chapter 8, if the host indicates MaxPayloadSizeToTargetInBytes=1024, but the target indicates it can use a larger value, do *not* switch to using the larger value since all of the hash digests will have been calculated using size 1024.

Another important attribute the target returns is MaxXMLSizeInBytes. This attribute indicates how much data the target will attempt to retrieve when it is expecting commands.

```
<?xml version="1.0" ?>
<data>
<configure MaxPayloadSizeToTargetInBytes="8192" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<response value="ACK" MaxXMLSizeInBytes="2048"
MaxPayloadSizeToTargetInBytes="8192" />
</data>
```


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MaxXMLSizeInBytes is not the same as MaxPayloadSizeToTargetInBytes. If a host command exceeds MaxXMLSizeInBytes the target will reject the packet and most likely will become out-of-sync with the host. It is also important that **no XML file is ever an exact multiple of 512 bytes** because the USB driver works on packet sizes of 512 bytes. So, if an XML file is exactly 512 bytes (or 1024 bytes, etc.), the USB driver will assume more data is present and will not notify the upper layers of the transfer. To get around this, the host must check the size of the XML file it is about to transfer. We suggest adding a newline character to the end in order to change the size to 513 bytes (or 1025 bytes, etc.). Note that an XML file can be exactly MaxXMLSizeInBytes without any issue.

<configure> attributes	Description
AckRawDataEveryNumPackets	Causes the target to send an ACK after every “Num” RAW DATA packets has been sent. For example, an ACK <response> will be sent every 400 RAW Data packets if AckRawDataEveryNumPackets=“400.” This can be used to throttle the host or get periodic feedback on very large file transfers
SkipWrite	Causes the target to skip writing the data to disk. This allows you to benchmark the performance of USB
AlwaysValidate	Causes the validation operation to occur on every packet (note that VIP is not enabled by this). This is used to see the impact of validation (hashing) without needing to enable secure boot
Verbose	Causes the target to send many more logs to the host
MaxDigestTableSizeInBytes	Used with VIP; indicates maximum size of the Digest Table, i.e., 8KB
MaxPayloadSizeToTargetInBytes	Maximum RAW DATA payload size, i.e., 128KB. Note that this value needs to be a multiple of 512. It is highly recommended this value is not smaller than SECTOR_SIZE_IN_BYTES

3.6 program

Programming a target is done with the <program> command. Anyone familiar with the rawprogram.xml/patch.xml approach of programming via Trace32/QPST has already seen this tag. Below shows the four fields an eMMC target needs for programming; they are found in a typical rawprogram.xml file as shown below.

```
<?xml version="1.0" ?>
<data>
  <program SECTOR_SIZE_IN_BYTES="512" num_partition_sectors="4096"
physical_partition_number="0" start_sector="0"/>
</data>
```

Actual <program> tags in rawprogram.xml files have many more attributes than shown above. As explained earlier, you are free to send all the attributes to the target. Below shows the <program> command also sending the *filename* attribute to the target, which is not needed.

```
<?xml version="1.0" ?>
<data>
  <program SECTOR_SIZE_IN_BYTES="512" filename="dummy.bin"
num_partition_sectors="4096" physical_partition_number="0" start_sector="0"/>
</data>
```


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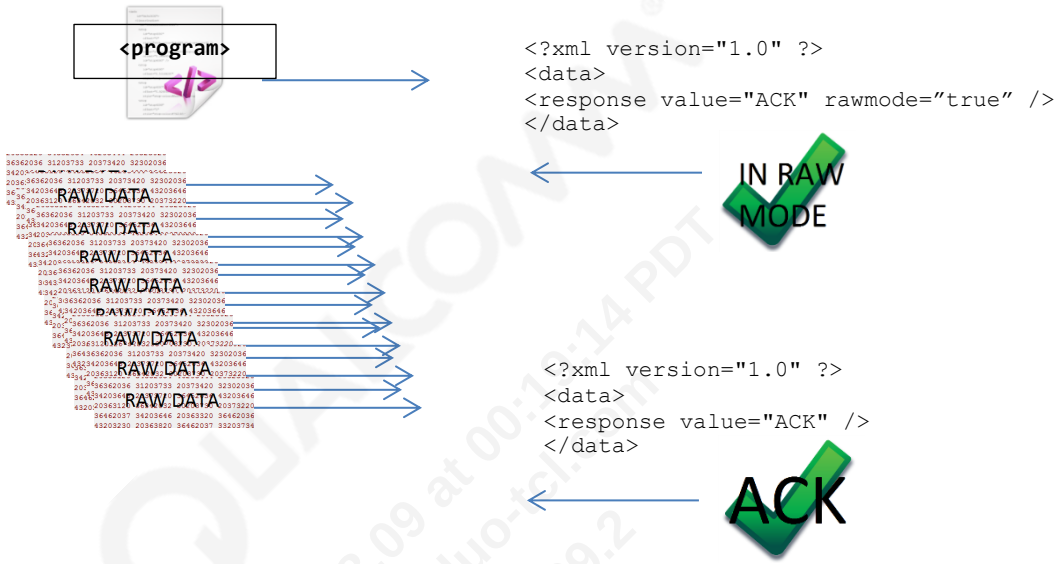
After receiving this <program> command, the target will respond by indicating it is now in RAW DATA mode via <response rawmode="true." At this point the host must begin sending as many RAW DATA packets as indicated by the num_partition_sectors. For example, if MaxPayloadSizeToTargetInBytes=131072 (128KB), then with num_partition_sectors=4096 and a SECTOR_SIZE_IN_BYTES=512, this is 2MB of total data and would take 16 RAW DATA packets of size 128KB. After this the target will respond with an ACK or NAK indicating if the write was successful.



NOTE: It is important to understand that once the target is in rawmode="true," it will treat any and all bytes received on the COM port as RAW DATA. Thus if you sent a <program> command with num_partition_sectors="200" and SECTOR_SIZE_IN_BYTES="512," the next 100KB the target receives (200*512 bytes/sector) is assumed to be RAW DATA meant for the write. Therefore, even if you sent an XML file to the target (i.e., a command), it will treat the bytes of that XML file as RAW DATA meant to be written to disk as instructed by the previous <program> command.

NOTE: The rawprogram.xml files are auto-generated by the partitioning tool ptool.py and they are an XML representation of a partition table. As a result, it is entirely possible that a particular partition could have num_partition_sectors="4194304," which is 2GB, but the file you need to program there is only 10 sectors (5KB). In this case it is recommended that you modify the num_partition_sectors="10" before sending the <program> command, since this is all the actual file data to program. Conversely, if you leave num_partition_sectors="4194304," then you are telling the target you will be sending that much data. Therefore, you would need to send 10 sectors of actual file data, and then zero pad out the remaining 4194294 (1.99GB), which would be time consuming and unnecessary.

3.7 getsha256digest

When a device is programmed it is often useful to get a unique signature of the data present. Then, if later you suspect the data has been modified, you can recalculate the signature, and see if it matches. If it does match, the data has not been tampered with. The <getsha256digest> command is 1:1 replaceable with a <program> command. The idea behind this is that an entire

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rawprogram.xml file can be used to get unique signatures of all files programmed, i.e., by simply replacing the word “program” with “getsha256digest.”

Below shows an all zero file called dummy.bin. This file was created with the **dd if=/dev/zero of=dummy.bin bs=65536 count=32** command and is exactly `2*1024*1024` bytes of 0’s. Using OpenSSL, the sha256 digest is shown below.

As shown in Section 3.6, this dummy.bin (2MB) file was written to Sector 0. We can now use a <getsha256command> to get a unique signature. With a sector size of 512, this 2MB file is 4096 sectors. Notice below that the fields needed are identical to a <program> command.

```
<?xml version="1.0" ?>
<data>
  <getsha256digest SECTOR_SIZE_IN_BYTES="512"
num_partition_sectors="4096" physical_partition_number="0"
start_sector="0"/>
</data>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Hash start sector 0 num
sectors 4096" />
</data>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Digest 5647F05EC18958947D32874EEB788FA396A05D0BAB7C1B71F112CEB7E9B31EEE" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<response value="ACK" />
</data>
```

Above shows that the sha256 digest is returned as a <log> value and it is identical to the one calculated with OpenSSL.

NOTE: Calculating a sha256 is a time consuming operation and, during this time the target can appear non-responsive. Below demonstrates <getsha256digest> over a 64MB region. Notice that the target will send out periodic <log> values to indicate it is still alive.

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```
<?xml version="1.0" ?>
<data>
  <getsha256digest SECTOR_SIZE_IN_BYTES="512"
num_partition_sectors="131072" physical_partition_number="0"
start_sector="0"/>
</data>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="114688 sectors more to hash" />
</data>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="114688 sectors more to hash" />
</data>
```

```
etc etc
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="16384 sectors more to hash" />
</data>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Hash start sector 0 num sectors 131072" />
</data>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Digest 16BBC38D746FA177C209F487C4259D98493BA410AE9F3AF602F08321BAE3E2E5" />
</data>
```

3.8 erase

Some FLASH memory devices have a built in *erase* command, which means the entire medium is over-written with either all 0x00 or all 0xFF. In the case of eMMC, this erase feature is only available on the USER partition, which is physical partition number 0.

```
<?xml version="1.0" ?>
<data>
<erase StorageDrive="0" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<response value="ACK" />
</data>
```

On eMMC devices the remaining seven physical partitions **do not support** the erase command. As a result, the above command will respond with a NAK. However, *erasing* digital memory really means overwriting the existing data with something else, typically all 0x00 or all 0xFF. You can, however, effectively *erase* a certain area of a FLASH memory by using a <program> command and merely writing some file there other than what is supposed to be there. For

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example, the first 33 sectors of a disk will hold a GPT partition table. The <program> command, below, effectively *erases* the GPT partition table.

```
<?xml version="1.0" ?>
<data>
  <program SECTOR_SIZE_IN_BYTES="512" num_partition_sectors="33"
physical_partition_number="0" start_sector="0" filename=”sbl1.mbn”/>
</data>
```

That is, by writing the secondary boot loader file (sbl1.mbn) to where the GPT partition table should be, the GPT partition table is effectively *erased*. Alternatively, you could create a 33 sector file of all zeros and achieve the same effect.

```
<?xml version="1.0" ?>
<data>
  <program SECTOR_SIZE_IN_BYTES="512" num_partition_sectors="33"
physical_partition_number="0" start_sector="0" filename=”all_zero_33_sectors.bin”/>
</data>
```

Finally, to put the GPT partition table back, use the original <program> command.

```
<?xml version="1.0" ?>
<data>
  <program SECTOR_SIZE_IN_BYTES="512" num_partition_sectors="33"
physical_partition_number="0" start_sector="0" filename=”gpt_main0.bin”/>
</data>
```

Therefore, all physical partitions can be *erased* and overwritten with *different* data (than what is intended to be there). Additionally, with Physical Partition 0, you also have the option of running the built in *erase* command and overwriting everything with 0x00.

3.9 setbootablestoragedrive

An eMMC card can set which physical partition is active. This is the physical partition that is bootable. Since each physical partition is a storage drive, below shows how to set eMMC BOOT1 as bootable.

```
<?xml version="1.0" ?>
<data>
<setbootablestoragedrive value="1" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<response value="ACK" />
</data>
```

3.10 patch

Anyone familiar with the rawprogram.xml/patch.xml approach of programming via Trace32/QPST has already seen this tag. For example, running ptool.py as shown below will generate the patch0.xml.

```
python ptool.py -x singleimage_partition_8960.xml
```


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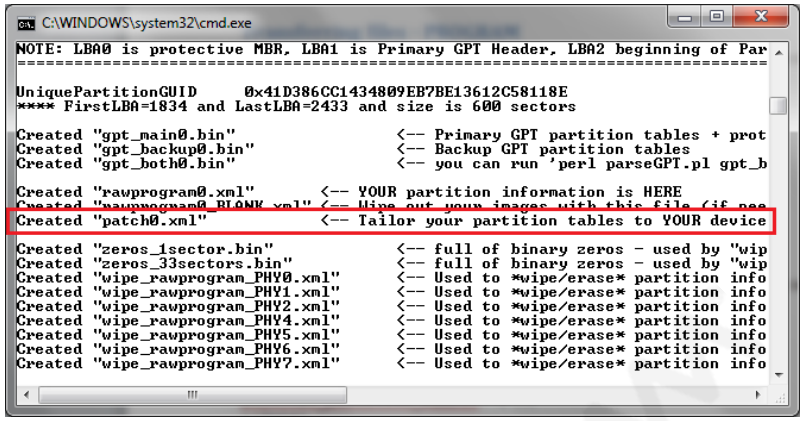

The patch.xml files exist because when partition tables are generated for a device, its size is not known beforehand (i.e., 8GB, 32GB, etc.). It is only during programming that the device is queried for its size. As a result, this value needs to be *patched* into the partition tables and other various fields in a GPT partition table. There are a total of 13 patches **that must be applied in order** in any patch.xml file. Below shows the six fields in a typical patch tag.

```
<patch byte_offset="40" physical_partition_number="0" size_in_bytes="8"
start_sector="7"  SECTOR_SIZE_IN_BYTES=”512” value="NUM_DISK_SECTORS-34." />
```

Since this is an auto-generated file, you do not need to know the details of what the patches are doing. Instead, the following is what you need to know.

- You must send the 13 patch tags one-by-one, each as its own XML file.
- 18You must only send the <patch> tags that specify filename=“DISK,” because patch.xml can also be used to patch files on the PC. In those cases, there will be <patch> tags that have filename=“gpt_main0.bin” or filename=“gpt_backup0.bin.” Do not send those tags to the target; only send patch tags that specify filename=“DISK.” Consequently, you can get in the habit of sending seven attributes with any <patch> command as shown below.

```
<patch byte_offset="40" physical_partition_number="0" size_in_bytes="8"
filename="DISK" start_sector="7"  SECTOR_SIZE_IN_BYTES=”512”
value="NUM_DISK_SECTORS-34." />
```

NOTE: When the target sends back an ACK, that means the patch was applied successfully.

```
<?xml version="1.0" ?>
<data>
<patch byte_offset="40" filename="DISK"
physical_partition_number="0" size_in_bytes="8"
start_sector="7" SECTOR_SIZE_IN_BYTES=”512”
value="NUM_DISK_SECTORS-34." />
</data>
```

→

←

```
<?xml version="1.0" ?>
<data>
<response value="ACK" />
</data>
```

NOTE: The <patch> tags in a patch.xml file are *in order*, because there are CRCs that need to be calculated only after certain operations are performed. **A patch.xml file will have 13 patches to be performed, and they need to be executed *in the order* they are listed in patch.xml.** Otherwise, the patches will be applied successfully, but your partition table will be corrupt

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because the patches were not applied in order. A target with a corrupt partition table will not boot and most likely will remain in emergency download mode.

3.11 setbootablestoragedrive

An eMMC card can set which physical partition is active. This is the physical partition that is bootable. Since each physical partition is a storage drive, below shows how to set eMMC BOOT1 as bootable.

```
<?xml version="1.0" ?>
<data>
<setbootablestoragedrive value="1" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<response value="ACK" />
</data>
```

3.12 createstoragedrives – privileged instruction

NOTE: A privileged instruction is one that an OEM might not want accessible to everyone. As a result, this instruction can be *compiled out*.

An eMMC card can create up to four general purpose partitions (GPPs). This is a one-time non-reversible operation. These drives are in addition to the four already existing physical partitions (drives) present. As a result, creating GPPs begins at Drive 4, as shown below. Note that drive numbers begin with 0.

```
<?xml version="1.0" ?>
<data>
<createstoragedrives
DRIVE4_SIZE_IN_KB="524288" DRIVE5_SIZE_IN_KB="0"
DRIVE6_SIZE_IN_KB="0" DRIVE7_SIZE_IN_KB="0"/>
</data>
```

```
<?xml version="1.0" ?>
<data>
<response value="ACK" />
</data>
```

3.13 power

To reset the target, use the power tag with value="reset." To power off, use value="off." There is also an optional DelayInSeconds="10," which will postpone the reset or off by 10 seconds. Note that there are no threads, which means the target is simply busy and waits 10 seconds before resetting or powering off.

```
<?xml version="1.0" ?>
<data>
<power value="reset" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<response value="ACK" />
</data>
```

3.14 benchmark

This command is covered in Section 7.3.

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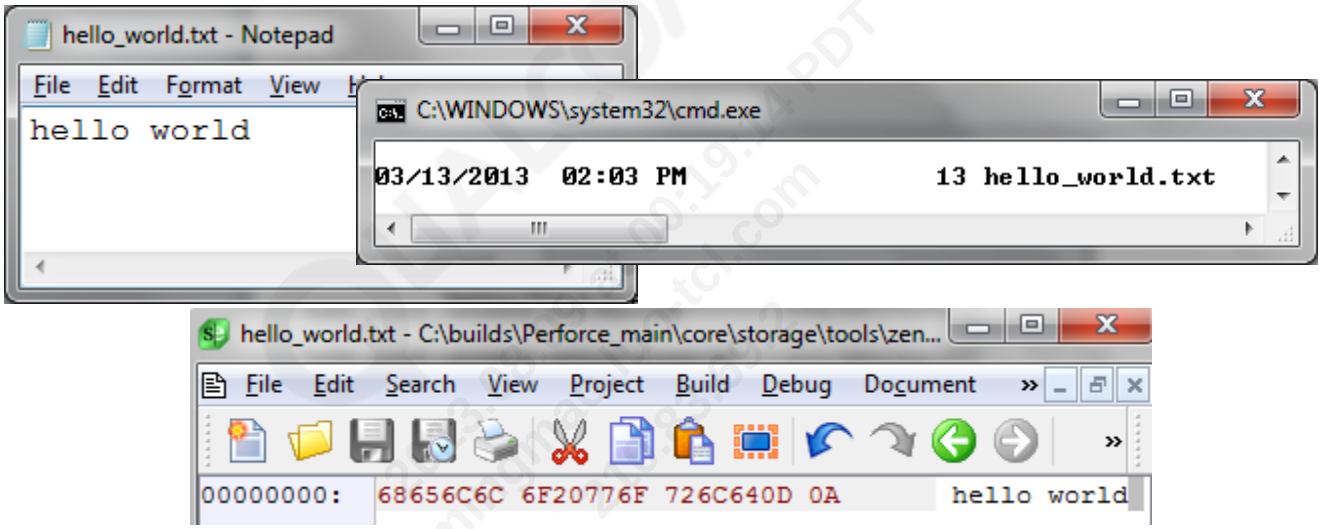
4 “Hello World” Example

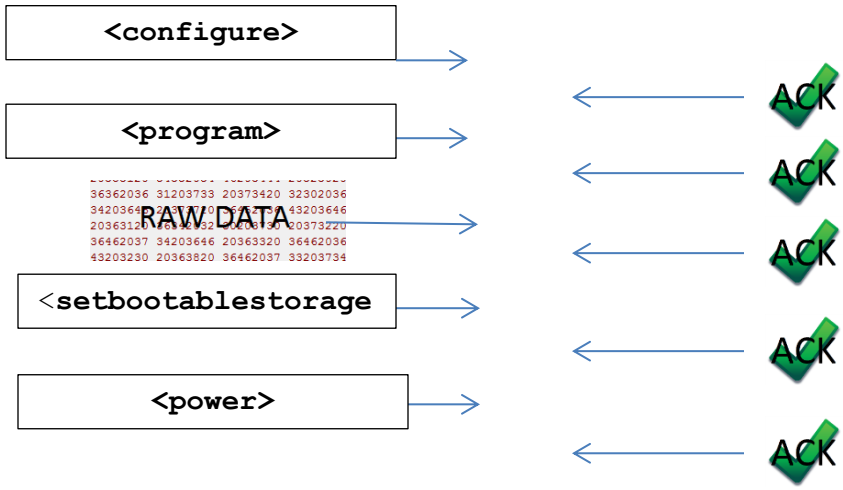
4.1 “Hello World” example

This section details how the Firehose protocol transfers the “hello_world.txt” file. As shown below, this file was created in Windows™ Notepad (Notepad). It is exactly 13 bytes because of the carriage return line feed that is added by Notepad (i.e., 0x0D, 0x0A).



In this example, the “hello_world.txt” file is written to an eMMC device, USER partition, which is Physical Partition 0 (physical drive 0) at Sector 0. At a high level, the example below shows the XML commands and RAW DATA that is transferred. There are a total of 10 transactions.

4.2 High level “Hello World” transfer



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4.3 Plain text level "Hello World" transfer

Below shows the "plain text" view as seen in a log when transferring "hello_world.txt." Notice that the <response> to the <configure> command has many attributes, and the <response> to the <program> command shows the "rawmode" attribute. There are a total of 10 transactions.

```
<?xml version="1.0" ?>
<data>
<configure MaxDigestTableSizeInBytes="4096" MemoryName="eMMC" TargetName="8960" MaxPayloadSizeToTargetInBytes="131072" />
</data>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" MinVersionSupported="1" MemoryName="eMMC" MaxPayloadSizeFromTargetInBytes="4096" MaxPayloadSizeToTargetInBytes="131072" Version="1" TargetName="8960" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<program SECTOR_SIZE_IN_BYTES="512" read_back_verify="1" num_partition_sectors="1" physical_partition_number="0" start_sector="0" />
</data>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" rawmode="true" />
</data>
```

```
Showing 512 bytes
68 65 6C 6C 6F 20 77 6F 72 6C 64 0D 0A 00 00 00        hello world.....
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00        ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00        ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00        ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00        ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00        ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00        ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00        ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00        ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00        ................
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" rawmode="false" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<setbootablestoragedrive value="0" />
</data>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>
```

```
<?xml version="1.0" ?>
<data>
<power value="reset" />
</data>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>
```

QUALCOMM 2013.08.06 10:14 PDT mingmao.mtcl.com 210.83.69.2

4.4 Channel level

Below are the low level XML files as they would be seen on the channel, i.e., no encoding. There are a total of 10 transactions.

```
Showing 160 bytes
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31        <?xml version="1
2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 63        .0" ?>.<data>.<c
6F 6E 66 69 67 75 72 65 20 4D 61 78 44 69 67 65        onfigure MaxDige
73 74 54 61 62 6C 65 53 69 7A 65 49 6E 42 79 74        stTableSizeInByt
65 73 3D 22 34 30 39 36 22 20 4D 65 6D 6F 72 79        es="4096" Memory
4E 61 6D 65 3D 22 65 4D 4D 43 22 20 54 61 72 67        Name="eMMC" Targ
65 74 4E 61 6D 65 3D 22 38 39 36 30 22 20 4D 61        etName="8960" Ma
78 50 61 79 6C 6F 61 64 53 69 7A 65 54 6F 54 61        xPayloadSizeToTa
72 67 65 74 49 6E 42 79 74 65 73 3D 22 31 33 31        rgetInBytes="131
30 37 32 22 20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A        072" />.</data>.
```

```
Showing 226 bytes
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31        <?xml version="1
2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54        .0" encoding="UT
46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65        F-8" ?><data><re
73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43        sponse value="AC
4B 22 20 4D 69 6E 56 65 72 73 69 6F 6E 53 75 70        K" MinVersionSup
70 6F 72 74 65 64 3D 22 31 22 20 4D 65 6D 6F 72        ported="1" Memor
79 4E 61 6D 65 3D 22 65 4D 4D 43 22 20 4D 61 78        yName="eMMC" Max
50 61 79 6C 6F 61 64 53 69 7A 65 46 72 6F 6D 54        PayloadSizeFromT
61 72 67 65 74 49 6E 42 79 74 65 73 3D 22 34 30        argetInBytes="40
39 36 22 20 4D 61 78 50 61 79 6C 6F 61 64 53 69        96" MaxPayloadSi
7A 65 54 6F 54 61 72 67 65 74 49 6E 42 79 74 65        zeToTargetInByte
73 3D 22 31 33 31 30 37 32 22 20 56 65 72 73 69        s="131072" Versi
6F 6E 3D 22 31 22 20 54 61 72 67 65 74 4E 61 6D        on="1" TargetNam
65 3D 22 38 39 36 30 22 20 2F 3E 3C 2F 64 61 74        e="8960" /></dat
61 3E                                                  a>
```

```
Showing 171 bytes
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31        <?xml version="1
2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 70        .0" ?>.<data>.<p
72 6F 67 72 61 6D 20 53 45 43 54 4F 52 5F 53 49        rogram SECTOR_SI
5A 45 5F 49 4E 5F 42 59 54 45 53 3D 22 35 31 32        ZE_IN_BYTES="512
22 20 72 65 61 64 5F 62 61 63 6B 5F 76 65 72 69        " read_back_veri
66 79 3D 22 31 22 20 6E 75 6D 5F 70 61 72 74 69        fy="1" num_parti
74 69 6F 6E 5F 73 65 63 74 6F 72 73 3D 22 31 22        tion_sectors="1"
20 70 68 79 73 69 63 61 6C 5F 70 61 72 74 69 74        physical_partit
69 6F 6E 5F 6E 75 6D 62 65 72 3D 22 30 22 20 73        ion_number="0" s
74 61 72 74 5F 73 65 63 74 6F 72 3D 22 30 22 20        tart_sector="0"
2F 3E 0A 3C 2F 64 61 74 61 3E 0A                       />.</data>.
```

```
Showing 91 bytes
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31        <?xml version="1
2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54        .0" encoding="UT
46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65        F-8" ?><data><re
73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43        sponse value="AC
4B 22 20 72 61 77 6D 6F 64 65 3D 22 74 72 75 65        K" rawmode="true
22 20 2F 3E 3C 2F 64 61 74 61 3E                       " />></data>
```


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Notice that the 13 byte "hello_world.txt" file is transferred as one complete sector of 512 bytes, as defined in the <program> tag, i.e., SECTOR_SIZE_IN_BYTES=512. So, if SECTOR_SIZE_IN_BYTES=4096, then it should be transferred as 4KB.

```
Showing 512 bytes
68 65 6C 6C 6F 20 77 6F 72 6C 64 0D 0A 00 00 00    hello world.....
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    ................
```

```
Showing 92 bytes
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31    <?xml version="1
2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54    .0" encoding="UT
46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65    F-8" ?><data><re
73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43    sponse value="AC
4B 22 20 72 61 77 6D 6F 64 65 3D 22 66 61 6C 73    K" rawmode="fals
65 22 20 2F 3E 3C 2F 64 61 74 61 3E                e" /></data>
```

```
Showing 76 bytes
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31    <?xml version="1
2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 73    .0" ?>.<data>.<s
65 74 62 6F 6F 74 61 62 6C 65 73 74 6F 72 61 67    etbootablestorag
65 64 72 69 76 65 20 76 61 6C 75 65 3D 22 30 22    edrive value="0"
20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A                />.</data>.
```

```
Showing 76 bytes
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31    <?xml version="1
2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54    .0" encoding="UT
46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65    F-8" ?><data><re
73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43    sponse value="AC
4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                K" /></data>
```

```
Showing 62 bytes
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31    <?xml version="1
2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 70    .0" ?>.<data>.<p
6F 77 65 72 20 76 61 6C 75 65 3D 22 72 65 73 65    ower value="rese
74 22 20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A          t" />.</data>.
```

```
Showing 76 bytes
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31    <?xml version="1
2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54    .0" encoding="UT
46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65    F-8" ?><data><re
73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43    sponse value="AC
4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                K" /></data>
```


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4.5 Log tags

The files above show the transactions between host and target when transferring the "hello_world.txt" file. The target may also send back LOGs in the form of <log> tags to the host. These will either be a part of the <response> XML file as additional tags, or as standalone XML files.

As a result, the host PC must be able to

- Parse multiple XML files in a single read
- Be prepared to parse multiple tags within a single XML file

NOTE: Due to memory limitations, the target can only handle XML files with a single tag, as shown in Section 2.2.

4.6 Logs as part of the response XML file

Below shows how a <response> from the target will look with <log> tags present.

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
<log value="Finished address 1, fh.channel_total_bytes_read=842" />
<log value="Here is another random log message" />
</data>
```

4.7 Logs as their own XML file

Below shows what a <log> will look like when the target sends these alone.

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Finished address 1, fh.channel_total_bytes_read=842" />
</data>
```


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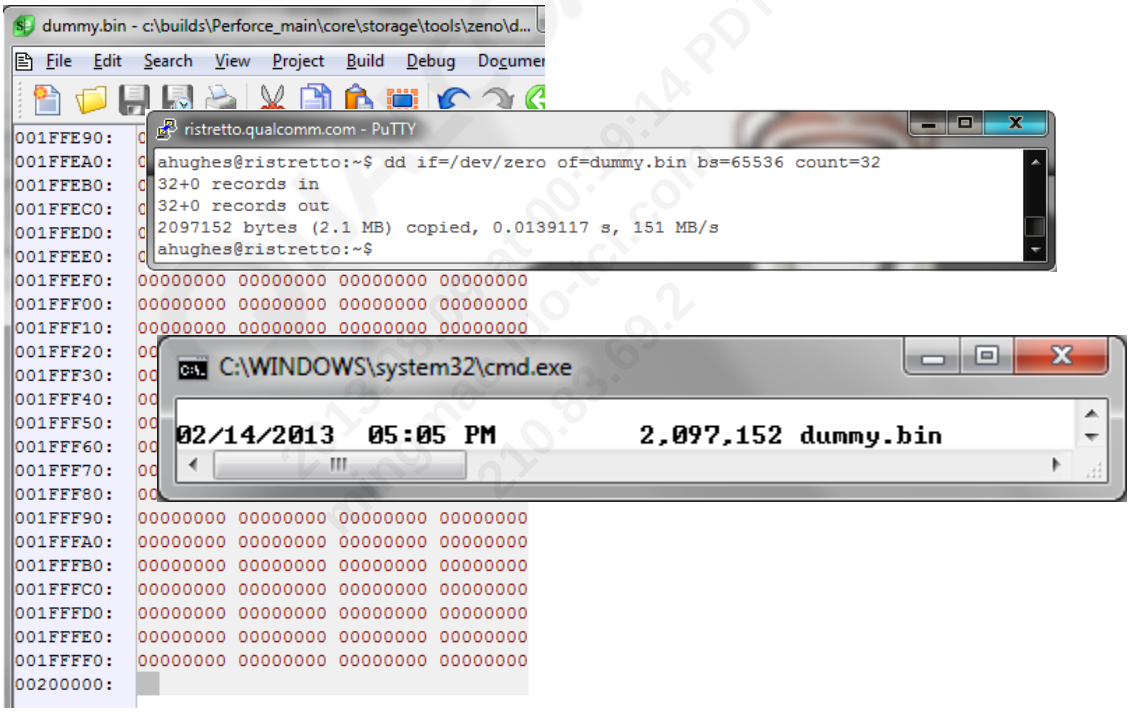
5 dummy.bin Example

5.1 Writing a large binary file

This section details how the Firehose protocol transfers the “dummy.bin” file. As shown below, this file was created with the **dd if=/dev/zero of=dummy.bin bs=65536 count=32** command and is exactly `2*1024*1024` bytes of 0’s.



The main difference in what this example shows is the multiple back-to-back RAW DATA packets from the host to the target, as shown below.

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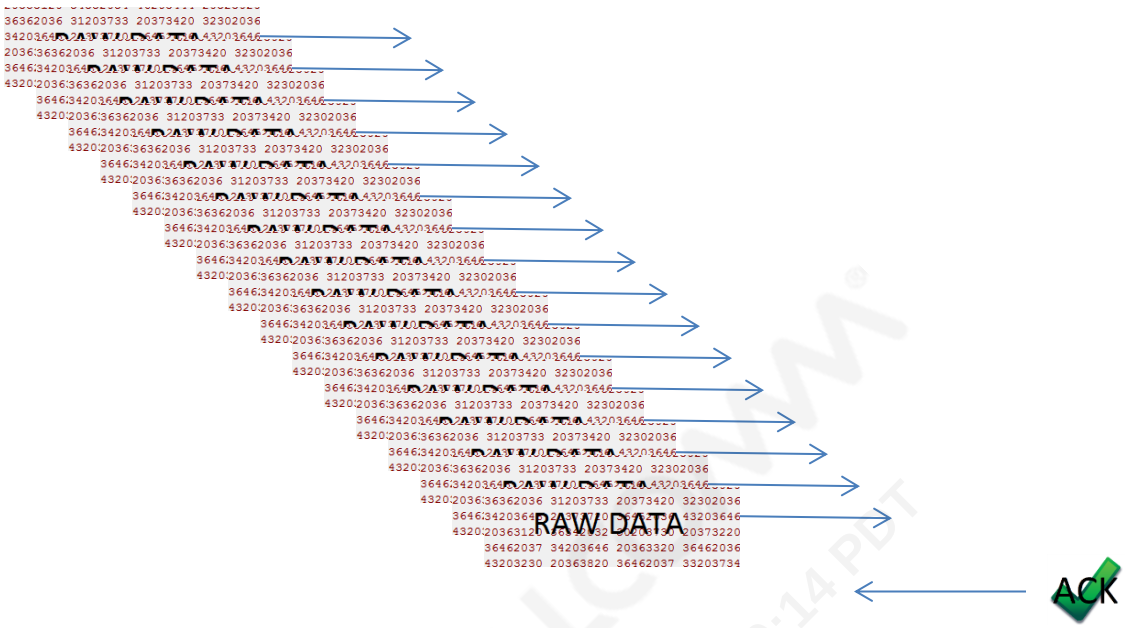

Therefore, this example will begin from the <program> command, since the <configure> command is the same. Beginning with the <program> XML file, we are informing the target to expect 4096 sectors, where sector size is 512 bytes. Thus, we are sending `4096*512=2097152` bytes.

```
<?xml version="1.0" ?>
<data>
<program SECTOR_SIZE_IN_BYTES="512" read_back_verify="1" num_partition_sectors="4096" physical_partition_number="0" start_sector="0" />
</data>
```

Notice, above, the “read_back_verify” attribute. Adding this means the target will *read back* during programming to ensure it was written correctly.

WARNING: Using read_back_verify will greatly degrade performance and tpyically is not needed.

Target responds that it is “rawmode,” meaning the next 2097152 bytes it receives will be written beginning at Sector 0 to Physical Partition 0 (i.e., storage drive 0, LUN 0, etc.).

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" rawmode="true" />
</data>
```


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The following data is sent 16 times, i.e., `16*128KB = 2097152` bytes.

```
Truncating 131072 bytes
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
...
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

This repeats 14 times.

```
Truncating 131072 bytes
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
...
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Finished sector address 4096, fh.channel_total_bytes_read=2097152 (4096 sectors)" />
</data>
```

This example shows how fast Firehose can be, since, without sending ACKs in response to every packet received, you are only limited by the speed of the channel (USB) and how fast the data can be written to the device.

See detailed log, **Transferring dummy.bin,** Section 11.2

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6 What about file integrity/reliability?

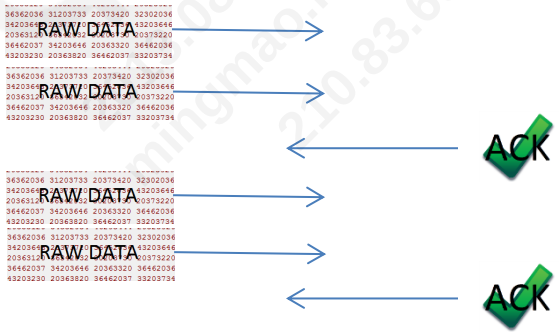
For speed, Firehose sends files completely before ever looking for an ACK. There is, however, a chance that something could go wrong during transfer or writing to the eMMC. With Firehose, these errors are not reported immediately because:

- Failures are the exception and not the rule.
- Most files written are done so quickly that, in the case of 2MB dummy.bin, the error in writing at Sector 0 or waiting until the file completes, is negligible to the user.

That being said, if you were to write a very large file, such as 1GB, you may want to have periodic checks along the way. This can be done in the following ways.

6.1 Enable AckRawDataEveryNumPackets

In the <configure> command, you can add the AckRawDataEveryNumPackets attribute. Doing this forces the target to send an ACK XML file for every X number of RAW DATA packets it receives. For example, below shows AckRawDataEveryNumPackets="2."



This is a reliable way to validate your data, but it can cut your throughput in half (i.e., due to the need of the bi-directional traffic). You should not have to use this feature, however, if used, it is recommended you choose AckRawDataEveryNumPackets to be a very large number such as 1000.

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6.2 Enable read_back_verify

As previously shown in the <program> command for dummy.bin, adding read_back_verify="1" to the <program> command forces the target to read back the data just written and verify it was written correctly. This is done internally and the user is only notified if the data does not match. This slows down programming speed, but ensures data is written reliably.

NOTE: This is not needed and is primarily included for troubleshooting in the event you suspect your targets' storage medium (i.e., eMMC) is not reliable.

NOTE: By default, Firehose will automatically perform a "read_back_verify" on the very first data transfer from every <program> command. The impact of this is negligible to overall programming speed. It is assumed that if the first write is successful, then all will be successful.

This attribute is added to the <program> command rather than the <configure> command because this attribute, if used, should only be selected for a few critical files and not for all files.

6.3 AttemptRetry

Firehose attempts to recover from errors to avoid having to remove devices from a factory line. In the event a packet is NAKed, there may be an optional AttemptRetry attribute. If present this means to go back to the previous command and try again. For example, if the host has sent a <program> command, followed by many RAW DATA packets, below could be the response sent by target.

```
<?xml version="1.0" ?>
<data>
<response value="NAK" AttemptRetry="1"/>
</data>
```

If AttemptRetry is present, the host should not exit, but instead send the <program> command once again and continue.

6.4 AttemptRestart

Firehose attempts to recover from errors to avoid having to remove devices from a factory line. In the event a packet is NAKed, there may be an optional AttemptRestart attribute. If present this means to go back to the very first command sent (start of state machine). For example, if the host has sent a <program> command, followed by many RAW DATA packets, below could be the response sent by target.

```
<?xml version="1.0" ?>
<data>
<response value="NAK" AttemptRestart="1"/>
</data>
```

If AttemptRestart is present, the host should not exit, but instead start over as if the host program has just been run for the first time. This means sending <configure> again and continuing from scratch. If using VIP, this means sending the signed digest table again and continuing.

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7 Troubleshooting

If performance drops, this can be due to a number of factors. On the host side, the issue may be PC disk access performance or loading; on the target side, the issue may be USB speed or storage medium speed. In order to help pinpoint this, Firehose can be run in a benchmarking mode.

NOTE: Your PC performance will have the most direct impact on speed.

7.1 SkipWrite

By specifying <configure SkipWrite="1," you are telling Firehose to perform every step as normal, except do not write any data to the storage device. The goal here is to see the performance of the system without the impact of actually committing it to eMMC. This essentially benchmarks USB performance and, as shown below with this PC and USB 2.0, the system achieves close to 20MBps on average.

```
2013-03-15 14:24:18,332 firehose.py 1001 INFO: 31% (elapsed=0.0060)      20.83MBps
2013-03-15 14:24:18,339 firehose.py 1001 INFO: 37% (elapsed=0.0060)      20.83MBps
2013-03-15 14:24:18,348 firehose.py 1001 INFO: 43% (elapsed=0.0060)      20.83MBps
2013-03-15 14:24:18,357 firehose.py 1001 INFO: 50% (elapsed=0.0060)      20.83MBps
2013-03-15 14:24:18,367 firehose.py 1001 INFO: 56% (elapsed=0.0080)      15.62MBps
2013-03-15 14:24:18,375 firehose.py 1001 INFO: 62% (elapsed=0.0070)      17.86MBps
```

7.2 AlwaysValidate

With Validated Image Programming (VIP), a sha256 digest is calculated on every received packet. You can see the impact of this operation on performance without having to first enable secure boot by specifying <configure AlwaysValidate="1."

NOTE: Validation is a more secure but slower way to program the target. See Chapter 8 for details.

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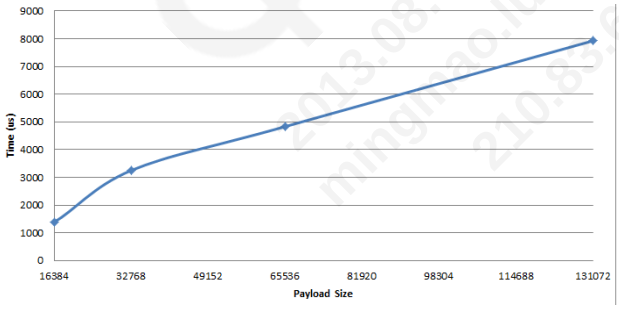
7.3 <benchmark>

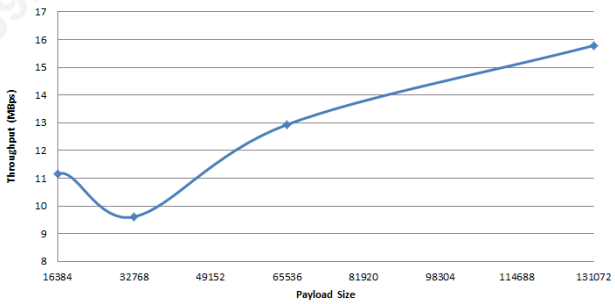
It is also useful to see the impact of just writing to the storage medium (i.e., eMMC). In this case, we need a way to write to the storage medium in a tight loop without being concerned about the overhead of the PC or USB transfer. As a result, the <benchmark> command currently supports TestWritePerformance. Below shows that write performance is almost linear with payload size. It also seems that on the MSM8974 Fluid, the speed (MBps) is improving with payload size. At 128KB, payload's speed is 15.78MBps (i.e., `131072 bytes / 7921µs`).

NOTE: This is a non-desctructive test. Data is first read from the device and then written back.

```
<?xml version="1.0" ?>
<data>
<benchmark trials="1000" TestWritePerformance="1" />
</data>
```

```
2013-03-07 17:27:23,446 INFO: FIREHOSE LOG: Writing 8192 bytes 1039 us 1000 trials
2013-03-07 17:27:24,835 INFO: FIREHOSE LOG: Writing 16384 bytes 1402 us 1000 trials
2013-03-07 17:27:28,095 INFO: FIREHOSE LOG: Writing 32768 bytes 3251 us 1000 trials
2013-03-07 17:27:32,946 INFO: FIREHOSE LOG: Writing 65536 bytes 4831 us 1000 trials
2013-03-07 17:27:40,885 INFO: FIREHOSE LOG: Writing 131072 bytes 7921 us 1000 trials
```





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8 Validated Image Programming

8.1 Background

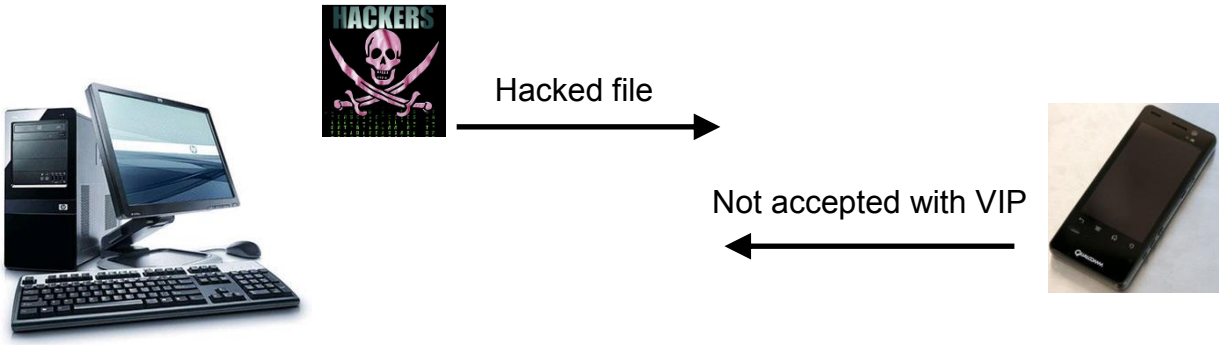
When secure boot is enabled, the primary boot loader (PBL) will only load the secondary boot loader (SBL) if the SBL is digitally signed and the signature passes. Likewise, the SBL will only execute the next stage of booting if that code is digitally signed and its signature passes. This process continues with each stage checking the signature of the next and if any one of those signatures along the boot chain do not pass, the phone abruptly halts. As such, the phone is *secure*, since it will only execute signed code.

By design, however, there is one drawback: When an already working target is upgraded, there is always the possibility of programming the device with *wrong data*. This wrong data can originate in many ways, such as:

- Wrong files for the target (i.e., files meant for a different target were written)
- Correct files written to the wrong location on the device
- Hacked/Corrupted files (possibly malicious or corrupted via transport)

Consequently, with secure boot enabled, this wrong data will not pass digital signature validation and will result in the boot sequence halting, as described above. This means that the once working phone is now "bricked" and needs to be returned to the factory.

As a result, it is necessary to ensure that the files programmed to the device are unmodified and written to the correct location.



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8.2 Validated image programming (VIP)

At a high level, programming a device is basically sending packets to the target. These packets (commands or raw data) encompass every aspect of programming, including which files are programmed and to what address.

Therefore, VIP controls which packets are allowed to be issued to the target.

This not only allows you to control which files are programmed, but also allows the customer to designate which commands are allowed/not allowed to be executed on the target.

Controlling which packets can be sent to the target is done through "hashing." The target performs a hashing function on all data it receives, and then compares the hash digest with a Table of Digests that is already present in memory (see Section 8.6). If the calculated hash digest matches the next entry in the digest table, the packet (data/command) is accepted. Otherwise, the packet is rejected and the target halts.

8.3 Simplest example – a single command

To understand the essence of VIP, assume that the target already has a Table of Digests with **`4312df6c048066938cbb38aa69dac897a42e26d6e41adf118a2466e94fc163ae`** (i.e., a single hash present). Then, from the "Hello World" example in Chapter 4 , assume that the target has received the <setbootablestoragedrive> command. As shown below, this XML command has the SHA256 digest **`4312df6c048066938cbb38aa69dac897a42e26d6e41adf118a2466e94fc163ae`**. Since this digest matches the one already present in memory, **this packet (which happens to be a command) would be accepted.** If, however, this command was modified, such as value="1" instead, the digest would not match since sha256 digests are unique. As a result, the packet would be rejected and the target would halt.

```
<?xml version="1.0" ?>
<data>
<setbootablestoragedrive value="0" />
</data>

Showing 76 bytes
3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 73         .0" ?>.<data>.<s
65 74 62 6F 6F 74 61 62 6C 65 73 74 6F 72 61 67         etbootablestorag
65 64 72 69 76 65 20 76 61 6C 75 65 3D 22 30 22         edrive value="0"
20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A                      />.</data>.

(sha256 4312df6c048066938cbb38aa69dac897a42e26d6e41adf118a2466e94fc163ae)
```

This demonstrates the essence of Validated Image Programming, in that the target only accepts packets it already expects.

8.4 VIP block diagram

From the example above, when the target receives a packet it will calculate a SHA256 HASH. This is then compared against the next hash digest already present in memory. If the digests match, the packet is accepted; if the digests do not match, the target halts.

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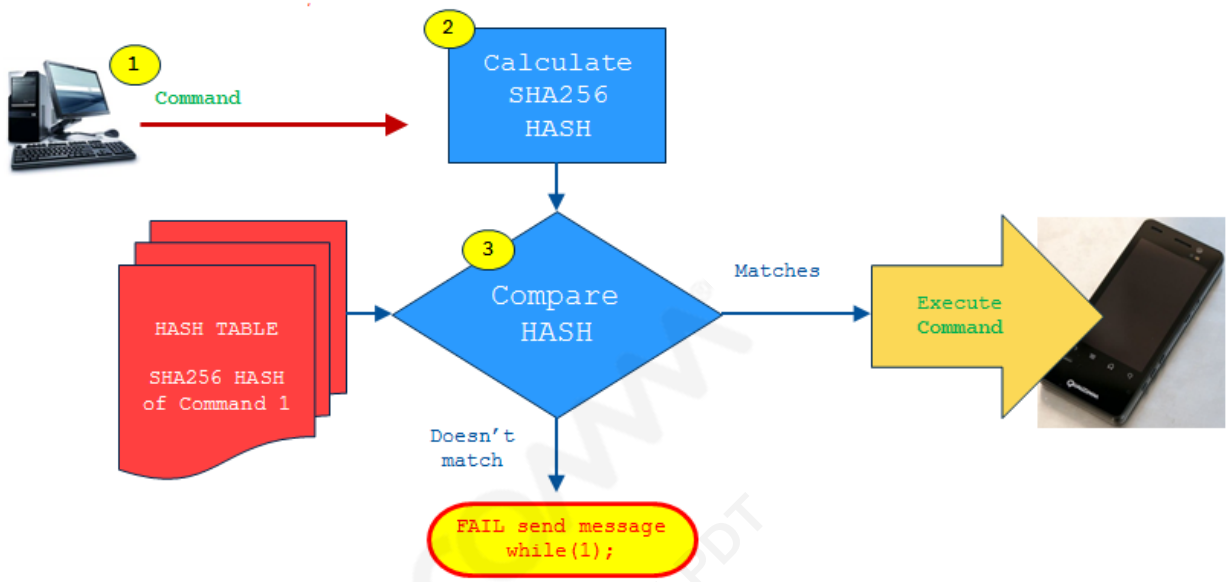
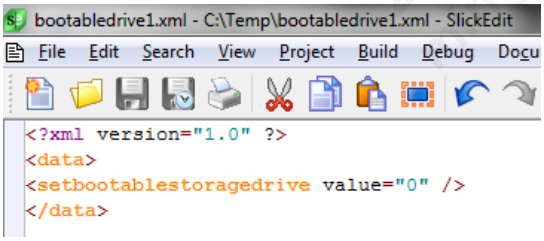
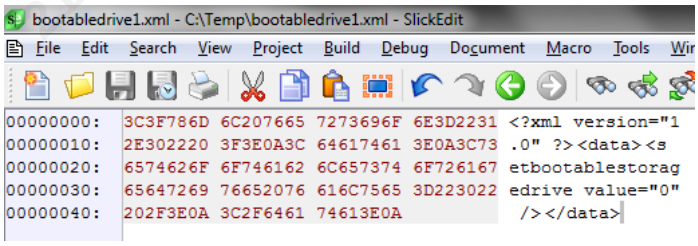


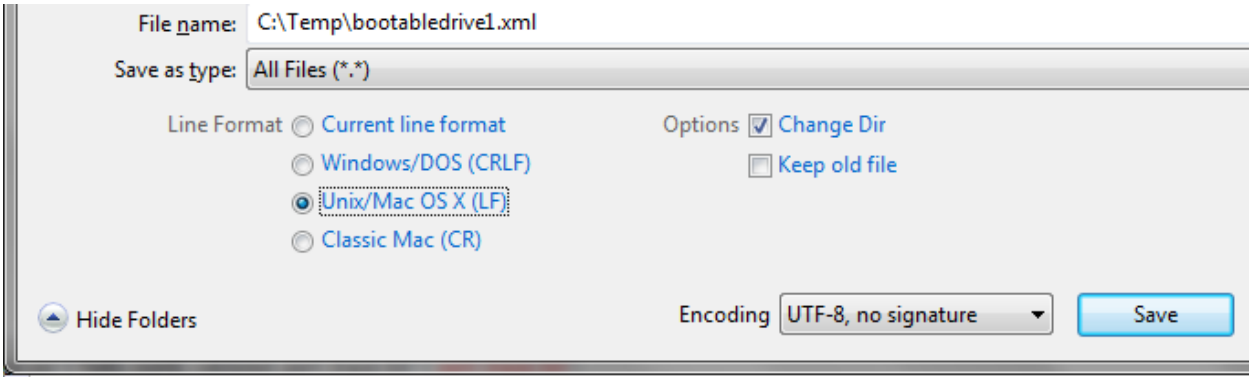
8.5 Hashing in action exercise

To test how hashing works create the file "bootabledrive1.xml," as shown below. To match the data, be sure to save it in a format where the Enter key (newline) is treated only as a line feed (LF=0x0A) and not a carriage return line feed (CRLF=0x0D 0x0A). Shown here is the "hex editor" view of the file for comparison.

NOTE: For completeness, at the end of this example the same file is shown with CRLF used.







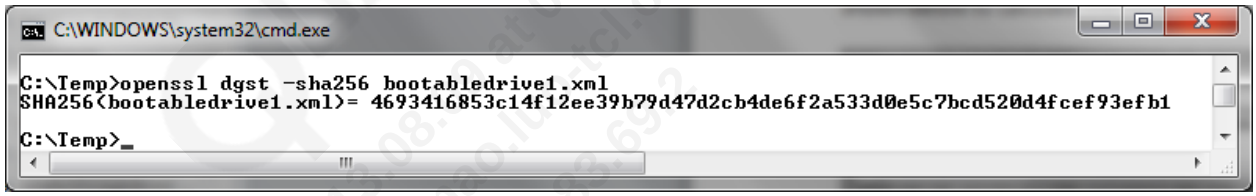
With this file you can perform the OpenSSL command,

openssl dgst -sha256 bootabledrive1.xml

to calculate the same digest as shown in Section 8.3.

To understand how a sha256 is unique, change the value attribute from "0" to "1," as shown below, and recalculate the digest on bootabledrive1.xml. The hash digest is completely different!

```
<?xml version="1.0" ?>
<data>
<setbootablestoragedrive value="1" />
</data>
```



Therefore, assuming a hacker attempted to change the bootable storage drive to "1," the digest would now be `4693416853c14f12ee39b79d47d2cb4de6f2a533d0e5c7bcd520d4fcef93efb1`, which would *not* match the digest stored in memory, i.e. `4312df6c048066938cbb38aa69dac897a42e26d6e41adf118a2466e94fc163ae`. Thus, this command would *not* be executed.

VIP only executes commands on target that are already authorized to run.

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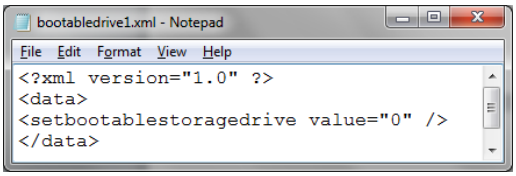
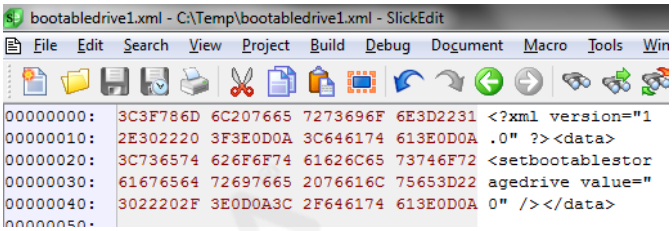
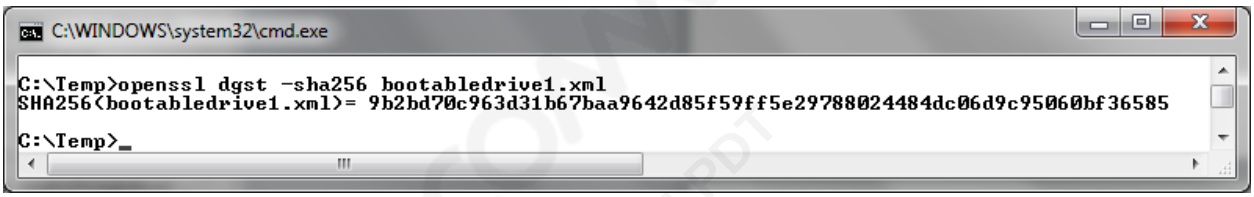
NOTE: If you make this file in Notepad, the hash digests will be different because of the CRLF (see below).



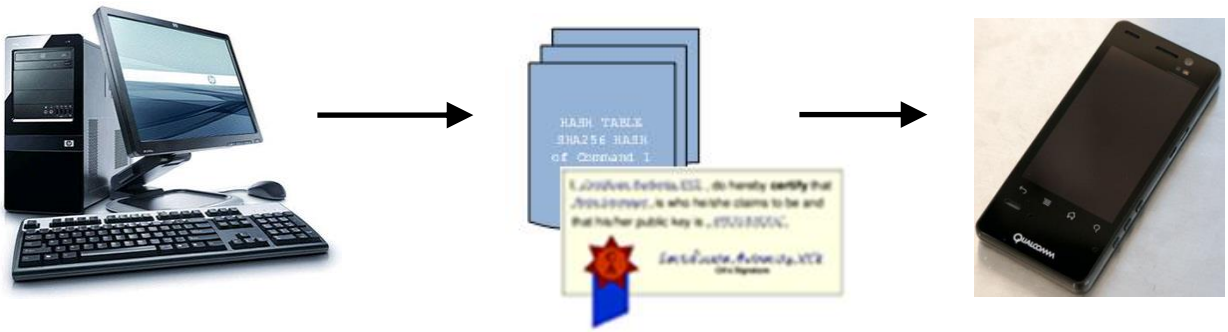




- Value to “0”: 9b2bd70c963d31b67baa9642d85f59ff5e29788024484dc06d9c95060bf36585
- Value to “1”: bf13f233a05e9bc333345d2ab90cea672a95405980a7e942247e45c6973a3899

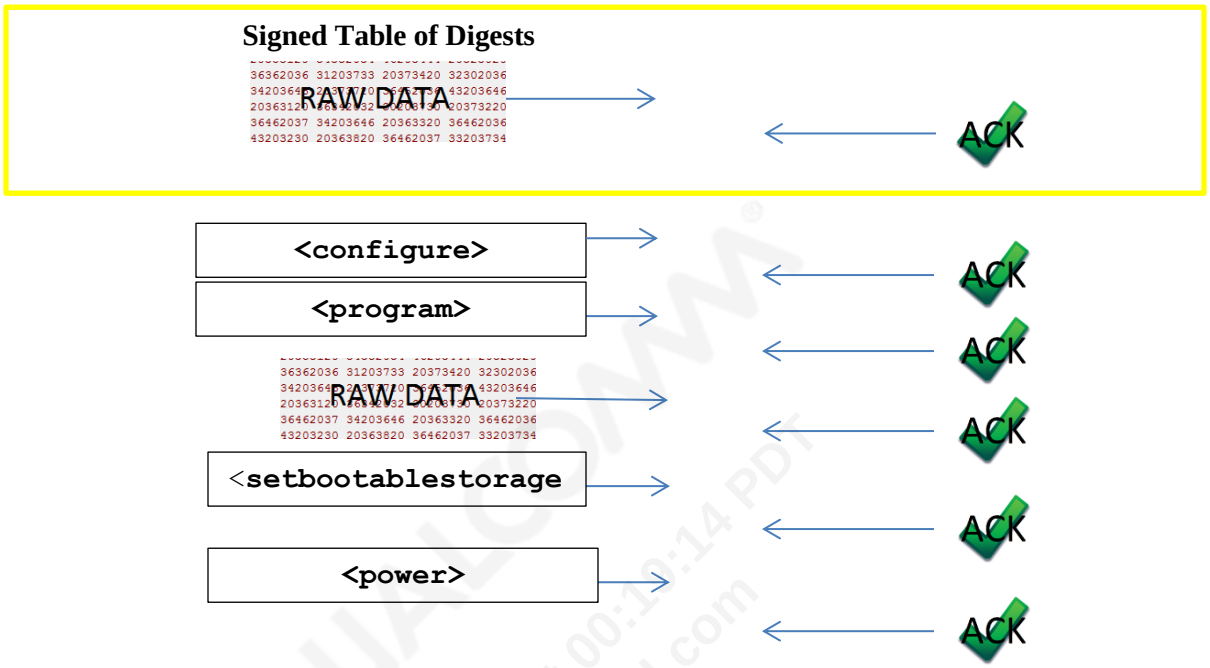
8.6 Table of digests

The first thing needed for VIP to work is to have the pre-authorized table of packets, i.e., the Table of Digests, present on the target. For Version 1 release of Firehose, this is a table of SHA256 HASH digests of every command/data sent to the target **in order.** Since it is not known beforehand which commands/data a customer wants to execute, this table must be sent to the device at run time. However, to ensure this table does not get tampered with, or that a hacker does not just send his own table, you must digitally sign the Table of Digests (VIP only runs on targets with “secure boot” enabled).



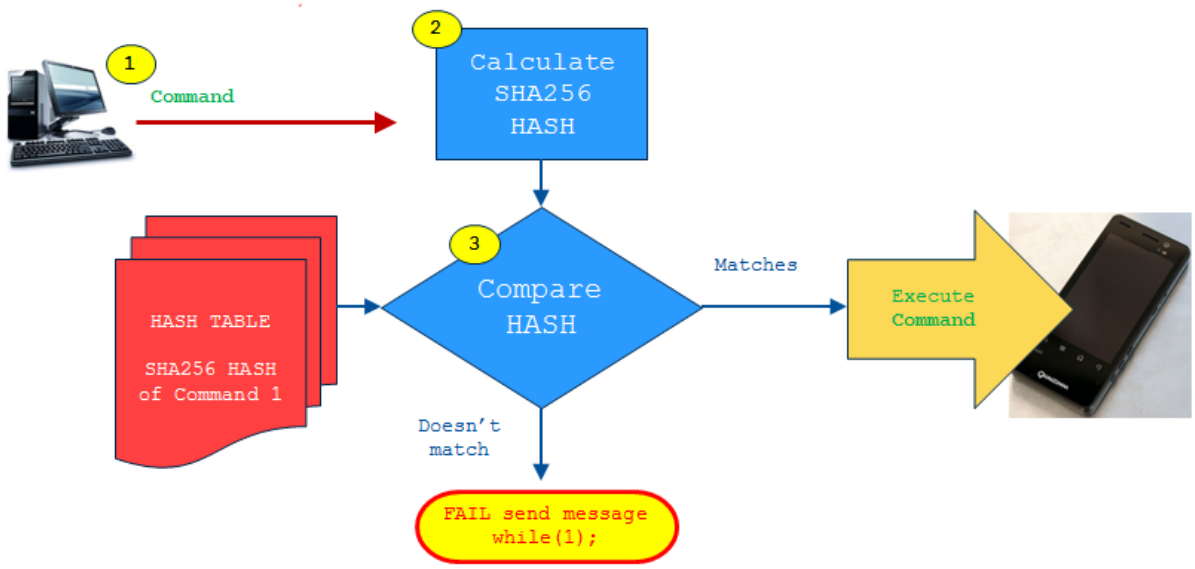
With the Table of Digests in memory, the target will now expect all packets to arrive in the same order listed in the Table of Digests. At a high level, a new “Hello World” example is shown below. **Compare this to the previous “Hello World” example** in Section 4.2.

8.7 “Hello World” high level VIP



The example above shows a total of 12 transactions; two more than without VIP. When using VIP, the target expects the first packet to be a RAW DATA packet (8KB max) holding the digitally signed Table of Digests. If this signature passes, the target accepts the Table of Digests.

Operation now continues as it did before. The only difference is that each packet the target receives has its SHA256 **validated** against the next HASH in the Table of Digest in memory *and* the packet is only accepted if the digests match.



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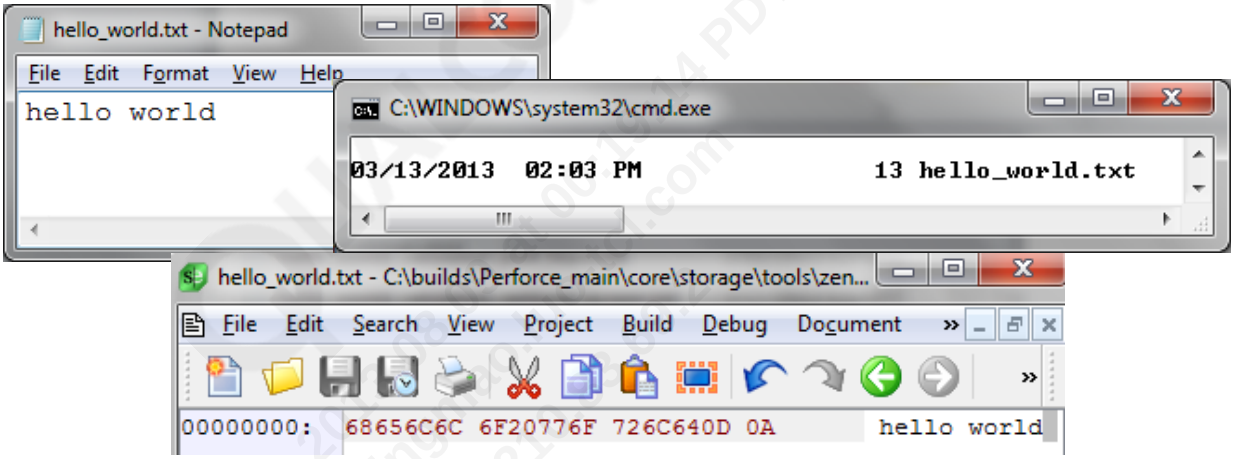
9 “Hello World” Example with VIP

9.1 “Hello World” example with VIP

This section details how the Firehose protocol transfers the “hello_world.txt” file with validation. As shown below, this file was created in Notepad, and is exactly 13 bytes because of the carriage return line feed (CRLF) that is added by Notepad, i.e. 0x0D, 0x0A. The screenshots below show the “hex editor” view for comparison.



In this example, the “hello_world.txt” file is written to an eMMC device, USER partition, which is Physical Partition 0 (physical drive 0) at Sector 0. The example below shows, at a high level, the XML files and RAW DATA that is transferred. Recall from the previous example that there were a total of 10 transactions; five of those transactions originate from the host and these are what the target will need to validate.

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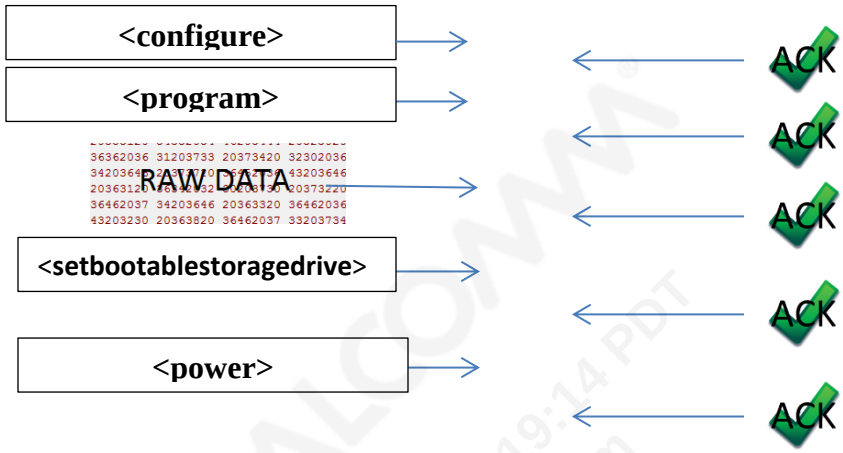
9.2 Commands to be validated

This example details the five commands that need to be validated, which is the five packets the host sends. The sections below show byte-for-byte what is sent over the channel, as well as its corresponding SHA256 hash.



9.2.1 configure

Below shows byte-for-byte the <configure> XML command (158 bytes) and its SHA256 hash.

```
<?xml version="1.0" ?>
<data>
<configure MaxDigestTableSizeInBytes="4096" MemoryName="eMMC" TargetName="8960" MaxPayloadSizeToTargetInBytes="8192" />
</data>
```

```
00000000:  3C3F786D 6C207665 7273696F 6E3D2231  <?xml version="1
00000010:  2E302220 3F3E0A3C 64617461 3E0A3C63  .0" ?> <data> <c
00000020:  6F6E6669 67757265 204D6178 44696765  onfigure MaxDige
00000030:  73745461 626C6553 697A6549 6E427974  stTableSizeInByt
00000040:  65733D22 34303936 22204D65 6D6F7279  es="4096" Memory
00000050:  4E616D65 3D22654D 4D432220 54617267  Name="eMMC" Targ
00000060:  65744E61 6D653D22 38393630 22204D61  etName="8960" Ma
00000070:  78506179 6C6F6164 53697A65 546F5461  xPayloadSizeToTa
00000080:  72676574 496E4279 7465733D 22383139  rgetInBytes="819
00000090:  3222202F 3E0A3C2F 64617461 3E0A      2" /> </data>
```

```
C:\WINDOWS\system32\cmd.exe

C:\Temp>openssl dgst -sha256 temp.xml
SHA256(temp.xml)= 99eff52921833599360b8c9106569985dec0010fd4e823a99a56a2ba02ea1158

C:\Temp>
```

NOTE: In the case of Validated Image Programming (VIP) discussed in Chapter 8, if the host indicates MaxPayloadSizeToTargetInBytes=1024, but the target indicates it can use a larger value, do *not* switch to using the larger value since all of the hash digests will have been calculated using size 1024.

```
<?xml version="1.0" ?>
<data>
<configure MaxPayloadSizeToTargetInBytes="8192" />
</data>
```

→

```
<?xml version="1.0" ?>
<data>
<response value="ACK" MaxXMLSizeInBytes="2048"
MaxPayloadSizeToTargetInBytes="8192" />
</data>
```

←

MaxXMLSizeInBytes is not the same as MaxPayloadSizeToTargetInBytes. If a host command exceeds MaxXMLSizeInBytes the target will reject the packet and most likely will become out-of-sync with the host. It is also important that **no XML file is ever an exact multiple of 512 bytes** because the USB driver works on packet sizes of 512 bytes. So, if an XML file is exactly 512 bytes (or 1024 bytes, etc.), the USB driver will assume more data is present and will not notify the upper layers of the transfer. To get around this, the host must check the size of the XML file it is about to transfer. We suggest adding a newline character to the end in order to change the size to 513 bytes (or 1025 bytes, etc.). Note that an XML file can be exactly MaxXMLSizeInBytes without any issue.

<configure> attributes	Description
AckRawDataEveryNumPackets	Causes the target to send an ACK after every "Num" RAW DATA packets has been sent. For example, an ACK <response> will be sent every 400 RAW Data packets if AckRawDataEveryNumPackets="400." This can be used to throttle the host or get periodic feedback on very large file transfers
SkipWrite	Causes the target to skip writing the data to disk. This allows you to benchmark the performance of USB
AlwaysValidate	Causes the validation operation to occur on every packet (note that VIP is not enabled by this). This is used to see the impact of validation (hashing) without needing to enable secure boot
Verbose	Causes the target to send many more logs to the host
MaxDigestTableSizeInBytes	Used with VIP; indicates maximum size of the Digest Table, i.e., 8KB
MaxPayloadSizeToTargetInBytes	Maximum RAW DATA payload size, i.e., 128KB. Note that this value needs to be a multiple of 512. It is highly recommended this value is not smaller than SECTOR_SIZE_IN_BYTES

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9.2.2 program

Below shows byte-for-byte the <program> XML command (178 bytes) and its SHA256 hash.

```
<?xml version="1.0" ?>
<data>
  <program SECTOR_SIZE_IN_BYTES="512" filename="hello_world.txt" num_partition_sectors="1" physical_partition_number="0" start_sector="0"/>
</data>
```

```
00000000:  3C3F786D 6C207665 7273696F 6E3D2231  <?xml version="1
00000010:  2E302220 3F3E0A3C 64617461 3E0A2020  .0" ?><data>
00000020:  3C70726F 6772616D 20534543 544F525F  <program SECTOR_
00000030:  53495A45 5F494E5F 42595445 533D2235  SIZE_IN_BYTES="5
00000040:  31322220 66696C65 6E616D65 3D226865  12" filename="he
00000050:  6C6C6F5F 776F726C 642E7478 7422206E  llo_world.txt" n
00000060:  756D5F70 61727469 74696F6E 5F736563  um_partition_sec
00000070:  746F7273 3D223122 20706879 73696361  tors="1" physica
00000080:  6C5F7061 72746974 696F6E5F 6E756D62  l_partition_numb
00000090:  65723D22 30222073 74617274 5F736563  er="0" start_sec
000000A0:  746F723D 2230222F 3E0A3C2F 64617461  tor="0"/></data
000000B0:  3E0A                                 >
```

9.2.3 RAW DATA – "hello_world.txt" file contents

The screenshots below show byte-for-byte the contents of "hello_world.txt" (13 bytes) and its SHA256 hash. Recall that because of the <program> command indicating that SECTOR_SIZE_IN_BYTES="512," this 13-byte file must be padded out to a multiple of one sector (i.e., 512 bytes).

```
00000000:  68656C6C 6F20776F 726C640D 0A000000  hello world
00000010:  00000000 00000000 00000000 00000000
00000020:  00000000 00000000 00000000 00000000
00000030:  00000000 00000000 00000000 00000000
00000040:  00000000 00000000 00000000 00000000
00000050:  00000000 00000000 00000000 00000000
00000060:  00000000 00000000 00000000 00000000
```

```
00000160:  00000000 00000000 00000000 00000000
00000170:  00000000 00000000 00000000 00000000
00000180:  00000000 00000000 00000000 00000000
00000190:  00000000 00000000 00000000 00000000
000001A0:  00000000 00000000 00000000 00000000
000001B0:  00000000 00000000 00000000 00000000
000001C0:  00000000 00000000 00000000 00000000
000001D0:  00000000 00000000 00000000 00000000
000001E0:  00000000 00000000 00000000 00000000
000001F0:  00000000 00000000 00000000 00000000
00000200:
```


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```
C:\WINDOWS\system32\cmd.exe
C:\Temp>openssl dgst -sha256 hello_world.txt
SHA256(hello_world.txt)= 6286949049c246ff92b9144abcc0030702f41aa28120c54083de678bb9497167

C:\Temp>
```

9.2.4 setbootablestoragedrive

Below shows byte-for-byte the <setbootablestoragedrive> XML command (76 bytes) and its SHA256 hash.

```
<?xml version="1.0" ?>
<data>
<setbootablestoragedrive value="0" />
</data>
```

```
00000000:  3C3F786D 6C207665 7273696F 6E3D2231  <?xml version="1
00000010:  2E302220 3F3E0A3C 64617461 3E0A3C73  .0" ?><data><s
00000020:  6574626F 6F746162 6C657374 6F726167  etbootablestorag
00000030:  65647269 76652076 616C7565 3D223022  edrive value="0"
00000040:  202F3E0A 3C2F6461 74613E0A           /></data>
```

```
C:\WINDOWS\system32\cmd.exe
C:\Temp>openssl dgst -sha256 temp.xml
SHA256(temp.xml)= 4312df6c048066938cbb38aa69dac897a42e26d6e41adf118a2466e94fc163ae

C:\Temp>
```


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9.2.5 power

Below shows byte-for-byte the <power> XML command (62 bytes) and its SHA256 hash.

```
<?xml version="1.0" ?>
<data>
<power value="reset" />
</data>
```

```
00000000:  3C3F786D 6C207665 7273696F 6E3D2231  <?xml version="1
00000010:  2E302220 3F3E0A3C 64617461 3E0A3C70  .0" ?> <data> <p
00000020:  6F776572 2076616C 75653D22 72657365  ower value="rese
00000030:  7422202F 3E0A3C2F 64617461 3E0A      t" /> </data>
```

```
C:\WINDOWS\system32\cmd.exe

C:\Temp>openssl dgst -sha256 temp.xml
SHA256(temp.xml)= cfbcefe68ef764dfc1ba5c334389826d5ea757c7571f3af669236b6c5e0ce8c0

C:\Temp>
```

9.3 Table of digests

From above, the Table of Digests consists of the five SHA256 hashes collected below.

```
(00) 99EFF52921833599360B8C9106569985DEC0010FD4E823A99A56A2BA02EA1158
(01) 7D1BAFE53098CB72B9C94E638020EEB1AD8FE92BCABF4E9A5842CEB1D17BA977
(02) 6286949049C246FF92B9144ABCC0030702F41AA28120C54083DE678BB9497167
(03) 4312DF6C048066938CBB38AA69DAC897A42E26D6E41ADF118A2466E94FC163AE
(04) CFBCEFE68EF764DFC1BA5C334389826D5EA757C7571F3AF669236B6C5E0CE8C0
```

The digest of these five hashes is `674f01a785acd8f33a716731454bbb390d95c39ec9460551e29eb90ff566e86b`. This hash is placed as the sixth hash (last hash) in the table.

```
(05) 674f01a785acd8f33a716731454bbb390d95c39ec9460551e29eb90ff566e86b
```

Now the complete Table of Digests consists of six SHA256 digests.

NOTE: The last hash is significant and will be covered in detail in Chapter 10.

9.4 How validated image programming works

When the target has the Table of Digests shown in Section 9.3 in memory, it will expect the next packet it receives to have the same HASH digest as entry (00). The packet the host sends will be the <configure> XML, which has the HASH, 99EFF52921833599360B8C9106569985DEC0010FD4E823A99A56A2BA02EA1158. This can be confirmed in Section 9.2. Since this matches entry (00) in the table in Section 9.3, this command will be accepted.

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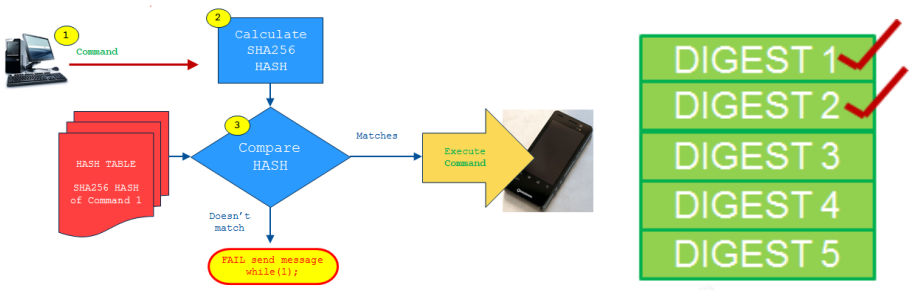

Next, the target will expect the packet it receives to have the same HASH as entry (01), which is 7D1BAFE53098CB72B9C94E638020EEB1AD8FE92BCABF4E9A5842CEB1D17BA977. As can be confirmed in Section 9.2, this is the <program> XML file and, as long as this command is sent next, it will be accepted.

This shows that commands must be sent in order.

If a user attempts to send a command that has already been sent (replay attack), it will be rejected. For example, if the user attempts to send the <configure> command twice, the first time it would be accepted, i.e. entry (00), but the second time it would be rejected. This is because the target has already moved on to the next entry (01) in the Table of Digests, and the digest of the "replayed" <configure> command will not match.

QUALCOMM® 2013.08.09 at 14:16:14 PDT mingmao.luo-tcl.com 210.83.69.2

NOTE: Enforcing **in order** execution is important since there is not enough memory to contain very large tables, and searching those tables would be too time consuming.

Thus, all commands must be executed in order with VIP.

9.5 HASH of the table of digests

The example above demonstrated how the Table of Digests is used with VIP. This table still needs to be digitally signed and sent to the target. These six hash digests are stored in a file called "**hello_TableOfdigests.bin.**" Since each digest is 32 bytes, this file is 192 bytes, as shown below in "hex editor" view.

```
00000000:  99EFF529 21833599 360B8C91 06569985 ™ïõ)!ƒ5™6 Œ' V™…
00000010:  DEC0010F D4E823A9 9A56A2BA 02EA1158 ÞÀ  Ôè#©šV¢° ê X
00000020:  7D1BAFE5 3098CB72 B9C94E63 8020EEB1 } ¯å0˜Ër¹ÉNc€ î±
00000030:  AD8FE92B CABF4E9A 5842CEB1 D17BA977   é+È¿NšXBÎ±Ñ{©w
00000040:  62869490 49C246FF 92B9144A BCC00307 b†" IÂFÿ'¹ J¼À
00000050:  02F41AA2 8120C540 83DE678B B9497167  ô ¢  Å@ƒÞg‹¹Iqg
00000060:  4312DF6C 04806693 8CBB38AA 69DAC897 C ßl €f"Œ»8ªiÚÈ—
00000070:  A42E26D6 E41ADF11 8A2466E9 4FC163AE ¤.&Öä ß Š$féOÁc®
00000080:  CFBCEFE6 8EF764DF C1BA5C33 4389826D Ï¼ïæŽ÷dßÁº\3C‚,m
00000090:  5EA757C7 571F3AF6 69236B6C 5E0CE8C0 ^§WÇW :öi#kl^ èÀ
000000A0:  674F01A7 85ACD8F3 3A716731 454BBB39 gO §…¬Øó:qg1EK»9
000000B0:  0D95C39E C9460551 E29EB90F F566E86B  •ÃžÉF Qâž¹ õfèk
```

```
C:\WINDOWS\system32\cmd.exe

04/24/2013  10:31 AM               192 DigestsToSign.bin
               1 File(s)            192 bytes
               0 Dir(s)  156,728,967,168 bytes free
```

9.6 Signing hello_TableOfDigests.bin

Digitally signing "**hello_TableOfDigests.bin**" (192 bytes) can be done with Qualcomm's Digital Signing Tool (QDST); however, it first needs to have the MBN header, as shown below.

```
image_id        =   27 <-- arbitrary number chosen
header vsn num  =    3 <-- current header version
image_src       =   40 <-- Offset of image from location 0 in bytes
image_dest_ptr  =    0 <-- Pointer to location to store in RAM
image_size      = 6592 <-- Size of Image+Signature+Certs
code_size       =  192 <-- Size of Image
signature_ptr   =  192 <-- Offset of signature from end of header
signature size  =  256 <-- Size of the signature in bytes
cert_chain_ptr  =  448 <-- Offset of cert chain from  end of header
cert_chain_size = 6144 <-- Size of the cert chain in bytes
```

Above shows the 40-byte MBN header that needs to be prepended to any image being signed. This header is unique to this example, i.e., notice its "code size" to be signed in 192 bytes. This header is shown below in hex editor form.

```
00000000:  1B000000 03000000 28000000 00000000
00000010:  C0190000 C0000000 C0000000 00010000
00000020:  C0010000 00180000
```

Below shows "**mbn_hello_TableOfdigests.bin**" (232 bytes), which is hello_TableOfdigests.bin (192 bytes) with the prepended MBN header (40 bytes).

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```
00000000:  1B000000 03000000 28000000 00000000          (
00000010:  C0190000 C0000000 C0000000 00010000 À   À   À
00000020:  C0010000 00180000 99EFF529 21833599 À       ™ïõ)!ƒ5™
00000030:  360B8C91 06569985 DEC0010F D4E823A9 6 Œ' V™…ÞÀ  Ôè#©
00000040:  9A56A2BA 02EA1158 7D1BAFE5 3098CB72 šV¢º ê X} ¯å0˜Ër
00000050:  B9C94E63 8020EEB1 AD8FE92B CABF4E9A ¹ÉNc€ î±  é+Ê¿Nš
00000060:  5842CEB1 D17BA977 62869490 49C246FF XBÎ±Ñ{©wb†" IÂFÿ
00000070:  92B9144A BCC00307 02F41AA2 8120C540 '¹ J¼À   ô ¢  Å@
00000080:  83DE678B B9497167 4312DF6C 04806693 ƒÞg‹¹IqgC ßl €f"
00000090:  8CBB38AA 69DAC897 A42E26D6 E41ADF11 Œ»8ªiÚÈ—¤.&Öä ß
000000A0:  8A2466E9 4FC163AE CFBCEFE6 8EF764DF Š$féOÁc®Ï¼ïæŽ÷dß
000000B0:  C1BA5C33 4389826D 5EA757C7 571F3AF6 Áº\3C‰,m^§WÇW :ö
000000C0:  69236B6C 5E0CE8C0 674F01A7 85ACD8F3 i#kl^ èÀgO §…¬Øó
000000D0:  3A716731 454BBB39 0D95C39E C9460551 :qg1EK»9 •ÃžÉF Q
000000E0:  E29EB90F F566E86B                   âž¹ õfèk
```

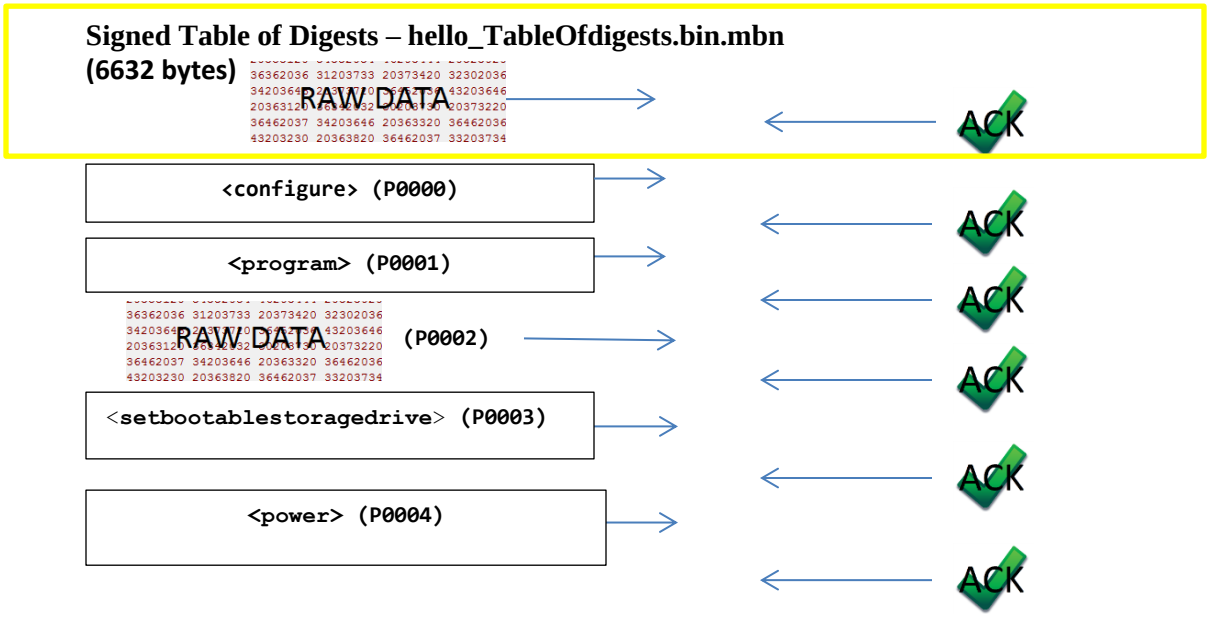
The final output from the digital signing tool is a single file of 6632 bytes. This "**hello_TableOfDigests.bin.mbn**" file is made up of the 232-byte contents of "**mbn_hello_TableOfDigests.bin,**" the 256-byte digital signature, and the three certificates created by the signing tool which are 6144 bytes.

```
C:\WINDOWS\system32\cmd.exe

04/24/2013  10:37 AM            6,632 hello_TableOfdigests.bin.mbn
               1 File(s)        6,632 bytes
               0 Dir(s)  156,703,924,224 bytes free
```

The payload of "**hello_TableOfDigests.bin.mbn**" is six hashes: one for each packet to send to the target (configure, program, hello_world.txt contents, setbootablestoragedrive, and power), and the sha256 hash of those five digests as the "last hash."

9.7 Detailed high level VIP "Hello World"



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The example above shows a more complete picture of how Validated Image Programming (VIP) works. The signed table of digests is sent first (6632 bytes). If this digital signature passes, it is ACKed and its payload (192 bytes, i.e.,six hashes) becomes the Table of Digests in memory.

The operation now continues as it did before; the only difference is that each packet the target receives has its SHA256 **validated** against the next hash in the Table of Digests in memory. Each packet sent is numbered beginning with <configure> (P0000), <program> (P0001), RAW DATA (P0002), etc. The packets are only accepted if the digests match. If any digest does not match the target rejects the packet and halts.

NOTE: The above shows that no sixth packet is sent, which makes the sixth hash (last hash) not needed. Again, the last hash is significant and will be covered in more detail in Chapter 10.

9.8 Packet/Hash number view of VIP "Hello World"

In the above example MaxDigestTableSizeInBytes was 4096. This means a digest table can hold 128 hash digests, each of size 32 bytes. The above example, however, only sent six hashes in the signed digest table. Thus, the FLASH programmer must load these digests as the last six in its table of 128 (locations numbered 0 to 127). Therefore, as shown below, these six hash digests are loaded at location 122, designated as (H0122).

```
(H0122) (00) 99EFF52921833599360B8C9106569985DEC0010FD4E823A99A56A2BA02EA1158
(H0123) (01) 7D1BAFE53098CB72B9C94E638020EEB1AD8FE92BCABF4E9A5842CEB1D17BA977
(H0124) (02) 6286949049C246FF92B9144ABCC0030702F41AA28120C54083DE678BB9497167
(H0125) (03) 4312DF6C048066938CBB38AA69DAC897A42E26D6E41ADF118A2466E94FC163AE
(H0126) (04) CFBCEFE68EF764DFC1BA5C334389826D5EA757C7571F3AF669236B6C5E0CE8C0
(H0127) (05) 674f01a785acd8f33a716731454bbb390d95c39ec9460551e29eb90ff566e86b
```

Since these commands are sent in order, we can number them as packets, as shown below.

```
(P0000) (H0122) (00) 99EFF52921833599360B8C9106569985DEC0010FD4E823A99A56A2BA02EA1158
(P0001) (H0123) (01) 7D1BAFE53098CB72B9C94E638020EEB1AD8FE92BCABF4E9A5842CEB1D17BA977
(P0002) (H0124) (02) 6286949049C246FF92B9144ABCC0030702F41AA28120C54083DE678BB9497167
(P0003) (H0125) (03) 4312DF6C048066938CBB38AA69DAC897A42E26D6E41ADF118A2466E94FC163AE
(P0004) (H0126) (04) CFBCEFE68EF764DFC1BA5C334389826D5EA757C7571F3AF669236B6C5E0CE8C0
(P0005) (H0127) (05) 674f01a785acd8f33a716731454bbb390d95c39ec9460551e29eb90ff566e86b
```

Thus, below shows the first RAW DATA packet sent to the target is the signed Table of Digests of size 6632. Since this is recognized as a mandatory first step for validation, the packets sent counter is reset (P0000), and the hash digests are loaded as described above. This makes the first packet sent (P0000), which was <configure>, and it is validated against (H0122), i.e., hash table location 122. Likewise, the second packet sent is (P0001), which was <program>, and it is validated against (H0123). This process continues until the fifth packet sent, <power>, is (P0004) validated against (H0126). This <power> command resets the target so there are no further commands sent.

Notice that, in this example, the sixth hash (H0127) is never used. This will be explained in more detail in Section 10.1.

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```
(channel data)--> HOST TO TARGET: 6632 bytes TO BE SENT CHANNEL (P0000) (H0000) <-- First Signed Table
        <==(channel data) 166 NEW BYTES READ FROM CHANNEL                       <-- ACK
(channel data)--> HOST TO TARGET: 158 bytes TO BE SENT CHANNEL (P0000) (H0122)  <-- <configure>
        <==(channel data) 396 NEW BYTES READ FROM CHANNEL                       <-- ACK
(channel data)--> HOST TO TARGET: 178 bytes TO BE SENT CHANNEL (P0001) (H0123)  <-- <program>
        <==(channel data) 173 NEW BYTES READ FROM CHANNEL                       <-- ACK
(channel data)--> HOST TO TARGET: 512 bytes TO BE SENT CHANNEL (P0002) (H0124)  <-- "hello_world.txt"
        <==(channel data) 178 NEW BYTES READ FROM CHANNEL                       <-- ACK
(channel data)--> HOST TO TARGET: 76 bytes TO BE SENT CHANNEL (P0003) (H0125)   <-- <setbootablestoragedrive>
        <==(channel data) 168 NEW BYTES READ FROM CHANNEL                       <-- ACK
(channel data)--> HOST TO TARGET: 62 bytes TO BE SENT CHANNEL (P0004) (H0126)   <-- <power>
        <==(channel data) 76 NEW BYTES READ FROM CHANNEL                        <-- ACK
```

9.9 Digests in the first table limited to 54 (actually 53)

The file "**hello_TableOfDigests.bin.mbn**" is 6632 bytes. This comes from a 40-byte MBN header + 192 byte hash table + 256 byte signature + 6144 of certificates. The only variable you control is the size of the hash table. It is 192 bytes, since each hash is 32 bytes and in this example there are six hash digests.

Your first signed Table of Hashes can only be a maximum of 8KB. Thus, from the above example, it means **"hello_TableOfDigests.bin.mbn"** can only be a maximum of 8KB.

As a result, this limits the number of hash digests in this "first table" to 54. However, as will be explained in Chapter 10, there can be multiple digest tables *chained together*, and the *last hash* in each table is special.

Therefore, the number of digests allowed in "hello_TableOfdigests.bin.mbn" is actually only 53, since hash digest 54 would be the sha256 hash of the original 53 commands, as explained in Section 9.3.

If, however, more than 53 packets need to be validated, then you need to use "chained digest tables" (see Chapter 10). **That is, if you have exactly 54 packets to validate, you will need two hash digest tables chained together.**

See detailed log, **Transferring "hello_world.txt" with VIP,** Section 11.3.

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10 Memory Constraints

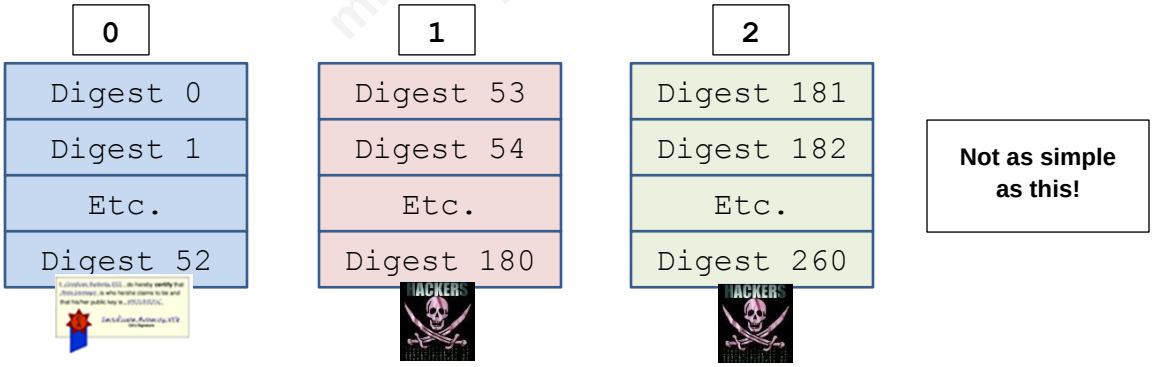
Validated Image Programming (VIP) works by having the target compare the hash digest of an incoming packet to the next entry in the Table of Digests already present in memory. If the hash digests match, the packet is accepted; otherwise it is rejected and the target halts.

The example shown so far had a total of six packets with each hash being 32 bytes. This caused the Table of Digests to be 192 bytes. However, in practice, the amount of data to be written to the target will be on the order of gigabytes and as a result, the Table of Digests is expected to be unbounded in size. Therefore, to avoid putting restrictions on the size of the Table of Digests, it can be broken into *multiple tables* that can be *chained* together.

10.1 Example of chained hash tables

Consider a situation where there are 261 packets to be sent to the target. This would require 261 hashes, for a total of 8352 bytes. Now consider a case where the target reports that 4KB (4096 bytes) is the MaxDigestTableSizeInBytes. Since 8352 bytes is larger than 4096 bytes, this Table of Digests will need to be broken up into multiple tables and **chained.**

As discussed in Section 9.9, the first signed table of digests can hold a maximum of 53 original hashes (or 54 if you include the "last hash"). With MaxDigestTableSizeInBytes=4096 bytes, all other digest tables can hold 128 hashes. Ignoring the "last hash" means that the first table would hold 53 hash digests, the second table would hold 128, and this would leave 80 hashes digests for the last table (`53+128+80=261`). Digest #0 to #260 is 261 original digests, as shown below.



Only Table #0, above, is secure since it is digitally signed. The other two digest tables are vulnerable to attack.

Therefore, to easily propagate the digital signature of the first table, we store the hash of each of the other digest tables as the "last hash" in each previous table. That is, take the sha256 hash of Table #2, and store that as the last hash in Table #1. Then take the sha256 hash of Table #1 and store this as the last hash in Table #0. Finally, digitally sign Table #0 (as done previously). This is shown below.

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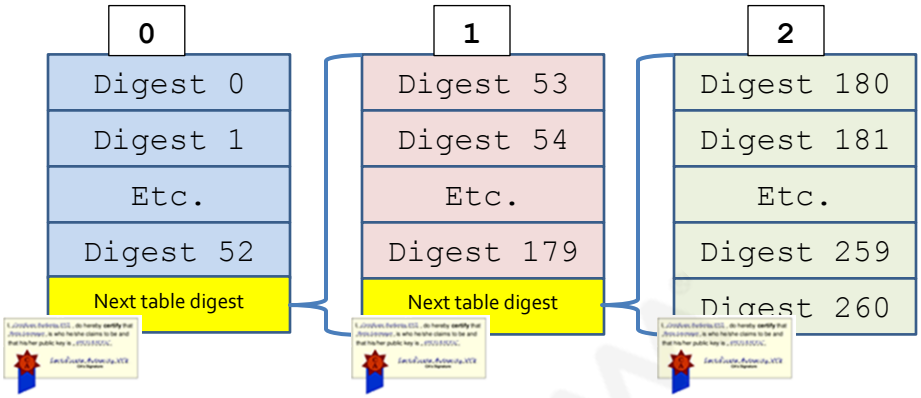


By storing the "hash of the next table" as the "last hash" in the current table, you are effectively propagating the digital signature across all tables. That is why the "last hash" is significant – the "last hash" in any table is always the hash of the next *chained* hash table.

NOTE: This is why the table of digests from Section 9.3 had five original hash digests, but a sixth one (the sha256 hash of the five original hashes) was added. Since there were no chained digest tables, we needed to put some hash digest as the "last hash." To prevent a vulnerability, the "last hash" was chosen to be the hash of the original five commands, since they are already authorized to run on the target.

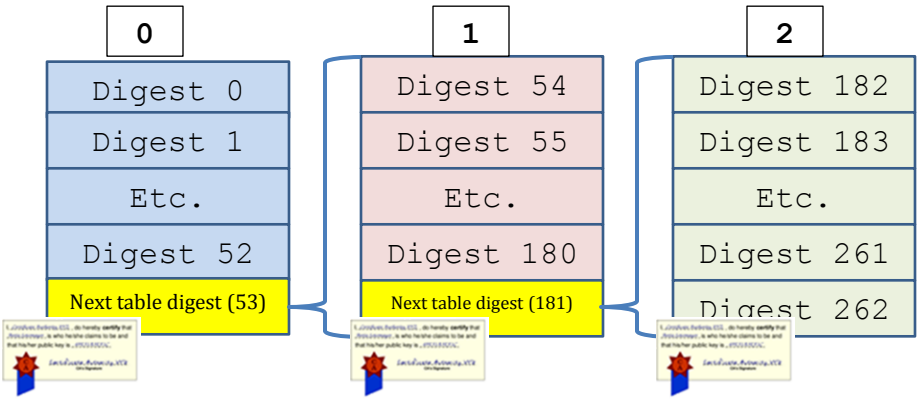
Note that above, in order to store the sha256 hash of Table #2 as the "last hash" in Table #1, we must make room by moving Digest 180 to Table #2. However, for Table #0, recall that it only holds 53 original hashes, even though it has room for 54. We can now use this "last hash" location (#54) to store the sha256 hash of Table #1. (Recall from Section 9.3, we originally stored the sha256 hash of the original five hashes.)

Table #0 holds 54 hashes and is exactly 1728 bytes

Table #1 holds 128 hashes and is exactly 4096 bytes

Table #2 holds 81 hashes and is exactly 2592 bytes

In summary, the hashes above are 54+128+81 = 263. Notice that with three *chained* digest tables we need two additional hashes. Therefore, 261 **original digests** + 2 **next table digests** = 263 total digests. Digest #0 to #262 is 263 total digests. **Below renumbers all hashes accordingly.**



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The system shown above works as follows:

1. The target receives the signed digest table, Table #0 (54 total digests).
2. If the digital signature passes, the table is accepted. Otherwise, the target halts.
   - Accepting the table means the target sends back an ACK.
3. The target then receives 53 commands/data in order (#0 to #52) **and notices it only has one digest left in the table (#53). This means that the next packet it receives must be the "next table." Note that the next packet the target receives will be treated as the next digest table whether it is or is not.**
4. The target receives Table #1 (128 digests), and compares its SHA256 hash with the last digest (#53) from Table #0. If it matches the table, it is accepted; otherwise, the target halts.
   - Accepting the table means the target sends back an ACK.
5. The target receives 127 commands/data in order (#54 to #180) **and notices it only has one digest left in the table (#181). This means that the next packet it receives must be the "next table." Note that the next packet the target receives will be treated as the next digest table whether it is or is not.**
6. The target receives Table #2 (81 digests), and compares its SHA256 hash with the last digest (#181) from Table #1. If it matches the table, it is accepted; otherwise, the target halts.
   - Accepting the table means the target sends back an ACK.
7. The target receives 81 commands/data in order (#182 to #262) **and notices there are *no digests left.* Therefore, this is treated as the last command/data allowed and halts.**

10.2 Implications of chained digest tables

The implication of the chaining of digest tables means that the host side must always keep track of how many packets it has sent to the target and always be prepared to inject the next digest table. As shown in the example above, there are 261 original commands/data to send. After the host has sent the first 53 packets, its 54th packet must be Digest Table #1. Likewise, the host will send 127 more packets, and then must send Digest Table #2.

NOTE: Consider in the above example if there were only 260 original digests. This only has the effect of reducing the last table by one digest (32 bytes). **While this seems trivial at first, it is significant because the last table is now an exact multiple of 512 bytes (80*32=2560 bytes), and, as previously stated, this will cause the USB driver to hang.** Recall that the USB driver will attempt to read exactly MaxDigestTableSizeInBytes from the channel. If the USB sees it has an exact multiple of 512 bytes, which is less than MaxDigestTableSizeInBytes, it assumes more data is coming and it indefinitely blocks (hangs) until more data arrives.

NOTE: Table #1 is also an exact multiple of 512 bytes (128*32=4096 bytes); however, since it is also exactly MaxDigestTableSizeInBytes in size, this is not an issue as described above.

NOTE: If your last digest table is a multiple of 512 bytes the easiest fix is to regenerate your digest tables, but add a <nop> command after your <configure> command. Alternatively, you can modify your MaxDigestTableSizeInBytes attribute to a different value, which has the effect of breaking up your digest tables into different sizes, so your last table is no longer a multiple of 512 bytes. This is shown next.

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10.3 Chained table example

Sending dummy.bin (2MB) with a MaxPayloadSizeToTargetInBytes=8192 (8KB) means 256 RAW DATA packets are required to transfer the file. Additionally, four more packets (<configure>, <program>, <setbootablestoragedrive>, and <power>), need to be sent for **a total of 260 packets.**

Recall from the previous example that using MaxDigestTableSizeInBytes=4096 would cause the last table to be an even multiple of 512.To avoid this, add a <nop> command as described above, or change MaxDigestTableSizeInBytes=992 (as an example). This means that each chained table will hold 31 hashes. With a total of 260 digests and 31 digests per table (numbered #0 to #30), a total of nine tables will be needed. From this, eight tables numbered #0 to #7 will have 31 digests each (size=992 bytes each), and the last table (Table #8) will have 20 digests (size=640 bytes).

NOTE: The first table which is digitally signed, normally holds up to 53 hashes + 1 hash for the next table. However, since MaxDigestTableSizeInBytes=992, the first table (and all tables) will only hold 30 hashes + 1 for the next table.

Digest Table #0 is shown below. It holds 31 hash digests.

- The first is the <configure> command which was seen before.
- The second is the <program> command indicating that a 2MB file is to be transferred.
- The next 28 hashes are the same since it is the hash of 8KB of binary zeros (recall that Firehose does no encoding of the data).
- The final hash is the hash of the next digest table.

```
DIGEST_TABLE #0
(00) F97E3788CF8CAE8A887C89DD9A8AD2F0C58C13F56366A1900B4E4DA3D4DBC268   <configure>
(01) C0952904564126CF174FC313A386D69E9394221056D8B38359581743B9B0AC5F   <program>
(02) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47   Each digest hashes an 8KB
(03) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47   RAW DATA packet of zeros
          all the same hash
(29) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(30) 8D963626C6B994DA2AC2B6FF65E34E5AB4DE0B8CF672459CAD91BE25B42B78D4   HASH of next table
```

Digest Tables #1 through #7 each hold 31 hash digests, most of which are identical since it is the hash of 8KB of binary zeros (recall that Firehose does no encoding of the data). Only the last HASH is different, since it is the SHA256 HASH of the next table.

```
DIGEST_TABLE #1
(00) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47   Each digest hashes an 8KB
(01) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47   RAW DATA packet of zeros
          all the same hash
(29) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(30) 9AFAE5B472989AEFF4742393956CD819639842EE969F08DE85E04F3950F4EC9D   HASH of next table

DIGEST_TABLE #2
(00) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47   Each digest hashes an 8KB
(01) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47   RAW DATA packet of zeros
          all the same hash
(29) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(30) 2FE1ECFBAD0A9AAC278ED641F481FF8D1F7B147EC8E0D39544BE4B2C912EC711   HASH of next table
```


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```
DIGEST_TABLE #3
(00) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(01) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
          all the same hash
(29) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(30) 4A26631D7E4BCCEEBE909DF26D890A2A8A427D4D4DF41A236814B82B6E2E900E

DIGEST_TABLE #4
(00) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(01) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
          all the same hash
(29) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(30) F8374D98388E29C82C6EB56762705F79B77151927023BA6E86F9EEDDE49FF09C

DIGEST_TABLE #5
(00) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(01) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
          all the same hash
(29) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(30) 95715FDF9635B04001F997170538DE524908E4B82A4A8CC7F366B26AAF9D89B3

DIGEST_TABLE #6
(00) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(01) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
          all the same hash
(29) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(30) DF429981F95CEDA810F7E93F8BE0BE390FE81EA2BBC2BC9664FA4BAF5F4D92AA

DIGEST_TABLE #7
(00) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(01) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
          all the same hash
(29) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(30) 6FDEAEE10F43A9E460F214AC9706A374571F8847A737B7888E95E8C0C0C618C8
```

Each digest hashes an 8KB RAW DATA packet of zeros

HASH of next table

Each digest hashes an 8KB RAW DATA packet of zeros

HASH of next table

Each digest hashes an 8KB RAW DATA packet of zeros

HASH of next table

Each digest hashes an 8KB RAW DATA packet of zeros

HASH of next table

Each digest hashes an 8KB RAW DATA packet of zeros

HASH of next table

The last Digest Table #8 holds 20 hashes total: 18 RAW DATA packets followed by the <setbootablestoragedrive> and <power> commands.

Finally, because this last table does not have 31 digests in it (0 to 30), it must be the last table. The target will recognize this is the last table since when it receives this table, its size will only be 640 bytes, not 992.

```
DIGEST_TABLE #8
(00) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(01) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
          all the same hash
(17) 9F1DCBC35C350D6027F98BE0F5C8B43B42CA52B7604459C0C42BE3AA88913D47
(18) 4312DF6C048066938CBB38AA69DAC897A42E26D6E41ADF118A2466E94FC163AE
(19) CFBCEFE68EF764DFC1BA5C334389826D5EA757C7571F3AF669236B6C5E0CE8C0
```

Each digest hashes an 8KB RAW DATA packet of zeros

<setbootablestoragedrive>

<power>

Note that sending the first table of digests (which is signed) is the first packet sent (P0000). However, it is not counted towards the overall packet count for validation since it has a digital signature validating it. Thus, the <configure> command is the first validated packet (P0000). Since there are eight other tables that must be sent every 31 packets, there are **a total of 268 packets to send.** For clarification, see the example below.

Also note that (P0017) would mean packet #17 (the 18th packet) and (H0017) would be hash digest number 17 (the 18th digest). Both of these are zero-based numbered. The hash digest number cycles from (H0000) to (H0031), whereas the packet number (Pxxxx) continually increases.

Below you can see that after the digitally signed table is sent (DigestTable#0), the packet counter is reset meaning <configure> is packet #0 (P0000). Then, the 31st packet (P0030) is

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DigestTable#1, validating against hash (H0030), which was the last hash in the First Signed Table. Transferring then continues as normal until (P0061), the 62nd packet which is DigestTable#2 validated against (H0030), which was the last hash in the current table. This continues until the last DigestTable#8 is sent at (P0247), which loads the last 20 digests.

```
(channel data)--> HOST TO TARGET: 7432 bytes TO BE SENT CHANNEL (P0000) (H0000) <-- First Signed Table
        <==(channel data) 166 NEW BYTES READ FROM CHANNEL                       <-- ACK
(channel data)--> HOST TO TARGET: 157 bytes TO BE SENT CHANNEL (P0000) (H0000)  <-- <configure>
        <==(channel data) 396 NEW BYTES READ FROM CHANNEL                       <-- ACK
(channel data)--> HOST TO TARGET: 175 bytes TO BE SENT CHANNEL (P0001) (H0001)  <-- <program>
        <==(channel data) 176 NEW BYTES READ FROM CHANNEL                       <-- ACK
(channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL (P0002) (H0002) <-- 8KB of zeros
etc etc
(channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL (P0029) (H0029) <-- 8KB of zeros
(channel data)--> HOST TO TARGET: 992 bytes TO BE SENT CHANNEL (P0030) (H0030)  <-- DigestTable#1
        <==(channel data) 76 NEW BYTES READ FROM CHANNEL                        <-- ACK
(channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL (P0031) (H0000) <-- 8KB of zeros
etc etc
(channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL (P0060) (H0029) <-- 8KB of zeros
(channel data)--> HOST TO TARGET: 992 bytes TO BE SENT CHANNEL (P0061) (H0030)  <-- DigestTable#2
                <==(channel data) 76 NEW BYTES READ FROM CHANNEL                <-- ACK
(channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL (P0062) (H0000) <-- 8KB of zeros
many more packets and tables go by
(channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL (P0245) (H0028) <-- 8KB of zeros
(channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL (P0246) (H0029) <-- 8KB of zeros
(channel data)--> HOST TO TARGET: 640 bytes TO BE SENT CHANNEL (P0247) (H0030)  <-- DigestTable#8
                <==(channel data) 76 NEW BYTES READ FROM CHANNEL                <-- ACK
(channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL (P0248) (H0000) <-- 8KB of zeros
etc etc
(channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL (P0265) (H0017) <-- 8KB of zeros
                <==(channel data) 181 NEW BYTES READ FROM CHANNEL               <-- ACK
(channel data)--> HOST TO TARGET: 76 bytes TO BE SENT CHANNEL (P0266) (H0018)   <-- <setbootablestoragedrive>
                <==(channel data) 168 NEW BYTES READ FROM CHANNEL               <-- ACK
(channel data)--> HOST TO TARGET: 62 bytes TO BE SENT CHANNEL (P0267) (H0019)   <-- <power>
                <==(channel data) 76 NEW BYTES READ FROM CHANNEL                <-- ACK
```

10.4 Important notes on VIP

- The above 2MB dummy.bin needs 256 packets (8KB max payload) to transfer. With Firehose, no ACKs are required until the very last packet; **however, with VIP**, a max table size of 31 means the next chained table must be sent every 31 packets and this must be ACKed. This will have a slight negative impact on performance.
- In the example above, each table held 31 digests, since MaxDigestTableSizeInBytes=992. Therefore, if you have exactly 31 commands to send you will need two tables because Firehose takes the last digest in the table to always be the hash of the next chained table.
- Care must also be taken so the last chained HASH table is not a multiple of 512 bytes unless it *exactly* matches MaxPayloadSizeToTargetInBytes. This is because the USB driver assumes any packet received that is exactly a multiple of 512 bytes, has more data to come. So, if MaxDigestTableSizeInBytes=4096 and the last digest table is exactly 1024 bytes, the USB driver will *hang* waiting for more data.

  For example, if the last table had only 16 digests (0 to 15), it would have been exactly 512 bytes. Therefore, we recommend re-generating the digest tables by either choosing a different MaxDigestTableSizeInBytes (not 992), or adding an additional command such as <nop> to make the number of digests in the last table 17.

See detailed log, **Transferring "dummy.bin" with VIP,** Section 11.4.

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11 Detailed Logs

The following sections are detailed LOGS from our internal test tool. They cover the examples used throughout this document. The logs show **complete** detail of every byte sent back and forth between host and target. From these logs, any questions this document did not answer should be found. The logs are:

- Section 11.1, Transferring hello_world.txt (13 byte file)
- Section 11.2, Transferring dummy.bin (2MB file of zeros)
- Section 11.3, Transferring hello_world.txt with VIP (simple validation example)
- Section 11.4, Transferring dummy.bin with VIP (chained digest table example)

11.1 Transferring hello_world.txt (13 byte file)

```
2013-04-23 16:28:56,861 zeno.py 470 INFO: ParseCommandLineOptions()
2013-04-23 16:28:56,877 zeno.py 683 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 16:28:56,892 zeno.py 684 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 16:28:56,892 zeno.py 685 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 16:28:59,904 common.py 2059 INFO:

        Looking for 'lsusb.py'  <--- LOOKING FOR THIS FILE

2013-04-23 16:28:59,904 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\lsusb.py (14.63 KB) (30 sectors)

2013-04-23 16:29:00,013 firehose.py 88 INFO: show states() See log for '4' Firehose Operations:
2013-04-23 16:29:00,013 firehose.py 90 INFO: 0) <function Configure at 0x022D8170>                      kwargs:
{}
2013-04-23 16:29:00,013 firehose.py 90 INFO: 1) <function SendFile at 0x022D8230>                       kwargs:
{'filename': 'hello_world.txt'}
2013-04-23 16:29:00,013 firehose.py 90 INFO: 2) <function SetBootableStorageDrive at 0x022D80F0>        kwargs:
{'SET_BOOTABLE_STORAGE_DRIVE_NUMBER': 0}
2013-04-23 16:29:00,013 firehose.py 90 INFO: 3) <function Reset at 0x022D7FB0>                          kwargs:
{}
2013-04-23 16:29:00,013 firehose.py 116 INFO:
Ensuring file exists before attempting programming
2013-04-23 16:29:00,013 common.py 2059 INFO:

        Looking for 'hello_world.txt'  <--- LOOKING FOR THIS FILE

2013-04-23 16:29:00,013 common.py 2064 INFO:
        **Found D:\Dropbox\zenos paradox\hello world.txt (13 B) (1 sectors)

2013-04-23 16:29:00,013 common.py 666 INFO: ser.portstr         \\.\COM4
2013-04-23 16:29:00,013 common.py 667 INFO: ser.parity          N
2013-04-23 16:29:00,013 common.py 668 INFO: ser.baudrate        921600
2013-04-23 16:29:00,013 common.py 669 INFO: ser.bytesize        8
2013-04-23 16:29:00,013 common.py 670 INFO: ser.stopbits        1

2013-04-23 16:29:00,013 common.py 678 INFO: Port \\.\COM4 opened

2013-04-23 16:29:00,013 firehose.py 123 INFO:  _                  _
2013-04-23 16:29:00,013 firehose.py 124 INFO: | |              (_)
2013-04-23 16:29:00,013 firehose.py 125 INFO: | |
2013-04-23 16:29:00,013 firehose.py 126 INFO: | '  \ /   \/  ` | | '  \
2013-04-23 16:29:00,013 firehose.py 127 INFO: | | ) |    / ( | | | | | |
2013-04-23 16:29:00,013 firehose.py 128 INFO: |_.__/ \___|\__, |_|_| |_|
```


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```
2013-04-23 16:29:00,029 firehose.py 129 INFO:              __/ |
2013-04-23 16:29:00,029 firehose.py 130 INFO:             |___/
2013-04-23 16:29:00,029 firehose.py 831 INFO:
(000) (H-001) FIREHOSE: Sending THIS Configure
2013-04-23 16:29:00,029 common.py 1846 DEBUG: SendString(160 bytes)
2013-04-23 16:29:00,029 common.py 1847 DEBUG:
******************************************************************************

<?xml version="1.0" ?>
<data>
<configure MaxDigestTableSizeInBytes="4096" MemoryName="eMMC" TargetName="8960"
MaxPayloadSizeToTargetInBytes="131072" />
</data>

2013-04-23 16:29:00,029 common.py 1848 DEBUG:
******************************************************************************
2013-04-23 16:29:00,029 common.py 628 INFO: (000) (H-001) SendString (00160 bytes)  <configure MaxDigestTable
2013-04-23 16:29:00,029 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:00,029 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 160 bytes TO BE SENT CHANNEL
(P0000) (H-0001)
2013-04-23 16:29:00,029 common.py 782 DEBUG:

        Truncating 160 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        30 37 32 22 20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A         072" />.</data>.
(sha256 d481269a5c98855255e22c13a086186a2b16eac959ca48e6c24b80598376704e)


2013-04-23 16:29:00,029 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 16:29:00,029 common.py 1583 DEBUG: FIREHOSE: RX Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 16:29:00,029 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 16:29:00,043 common.py 1343 DEBUG:           <==(channel data) 398 NEW BYTES READ FROM CHANNEL
        Truncating 398 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        31 42 34 45 38 22 20 2F 3E 3C 2F 64 61 74 61 3E         1B4E8" /></data>
(sha256 5206fde39655f3d1b443e10b5ac85c39eb606d30febecff7f71b67a2940417f8)


2013-04-23 16:29:00,043 common.py 1621 DEBUG:
==============================================================================
2013-04-23 16:29:00,043 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 299 bytes) -
RX_Buffer still holds 99 bytes:
2013-04-23 16:29:00,043 common.py 1623 DEBUG:
==============================================================================
2013-04-23 16:29:00,043 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" MinVersionSupported="1" MemoryName="eMMC" MaxPayloadSizeFromTargetInBytes="4096"
MaxPayloadSizeToTargetInBytes="131072" MaxPayloadSizeToTargetInBytesSupported="131072" MaxXMLSizeInBytes="4096"
Version="1" TargetName="8974" />
</data>


2013-04-23 16:29:00,043 common.py 1625 DEBUG:
==============================================================================

2013-04-23 16:29:00,043 firehose.py 743 INFO: FIREHOSE: Parsing the CONFIGURE response
2013-04-23 16:29:00,043 common.py 1476 DEBUG: FIREHOSE: GetAttrib("Version")=1
2013-04-23 16:29:00,043 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MinVersionSupported")=1
2013-04-23 16:29:00,043 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxXMLSizeInBytes")=4096
2013-04-23 16:29:00,043 common.py 1476 DEBUG: FIREHOSE:
GetAttrib("MaxPayloadSizeToTargetInBytesSupported")=131072
2013-04-23 16:29:00,043 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxPayloadSizeToTargetInBytes")=131072
2013-04-23 16:29:00,043 common.py 1476 DEBUG: FIREHOSE: GetAttrib("TargetName")=8974
2013-04-23 16:29:00,043 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MemoryName")=eMMC
2013-04-23 16:29:00,043 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxPayloadSizeFromTargetInBytes")=4096
2013-04-23 16:29:00,043 common.py 2059 INFO:

        Looking for 'hello_world.txt'  <--- LOOKING FOR THIS FILE

2013-04-23 16:29:00,043 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\hello_world.txt (13 B) (1 sectors)

2013-04-23 16:29:00,043 firehose.py 1295 INFO: Filename: 'D:\Dropbox\zenos paradox\hello world.txt' (13 B)
2013-04-23 16:29:00,043 firehose.py 1301 INFO:
FIREHOSE: SingleFile()
```


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```
2013-04-23 16:29:00,043 firehose.py 1302 INFO:
(001) (H000) FIREHOSE: Sending a 'single file' rawprogram.xml for 'D:\Dropbox\zenos_paradox\hello_world.txt'
2013-04-23 16:29:00,043 common.py 2059 INFO:

        Looking for 'hello world.txt'  <--- LOOKING FOR THIS FILE

2013-04-23 16:29:00,043 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\hello_world.txt (13 B) (1 sectors)

2013-04-23 16:29:00,043 firehose.py 997 INFO: Filename: 'D:\Dropbox\zenos_paradox\hello_world.txt' (13 B)
2013-04-23 16:29:00,043 firehose.py 1086 INFO:
FIREHOSE: SendXMLFile(178 bytes)
2013-04-23 16:29:00,043 firehose.py 1087 INFO:
(001) (H000) FIREHOSE: SendXMLFile('None')
2013-04-23 16:29:00,059 common.py 1846 DEBUG: SendString(178 bytes)
2013-04-23 16:29:00,059 common.py 1847 DEBUG:
****************************************************************************

<?xml version="1.0" ?>
<data>
  <program SECTOR_SIZE_IN_BYTES="512" filename="hello_world.txt" num_partition_sectors="1"
physical_partition_number="0" start_sector="0"/>
</data>

2013-04-23 16:29:00,059 common.py 1848 DEBUG:
****************************************************************************
2013-04-23 16:29:00,059 common.py 628 INFO: (001) (H000) SendString (00178 bytes)    <program SECTOR_SIZE_IN
2013-04-23 16:29:00,059 common.py 766 DEBUG:
****************************************************************************
2013-04-23 16:29:00,059 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 178 bytes TO BE SENT CHANNEL
(P0001) (H0000)
2013-04-23 16:29:00,059 common.py 782 DEBUG:

        Truncating 178 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        72 3D 22 30 22 2F 3E 0A 3C 2F 64 61 74 61 3E 0A         r="0"/>.</data>.
(sha256 7d1bafe53098cb72b9c94e638020eeb1ad8fe92bcabf4e9a5842ceb1d17ba977)


2013-04-23 16:29:00,059 firehose.py 1266 INFO: FIREHOSE: <data> tag found, ignoring
2013-04-23 16:29:00,059 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 99 bytes
2013-04-23 16:29:00,059 common.py 1621 DEBUG:
============================================================================
2013-04-23 16:29:00,059 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 99 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 16:29:00,059 common.py 1623 DEBUG:
============================================================================
2013-04-23 16:29:00,059 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="logbuf@0xF801E5C4 fh@0xF801B4E8" />
</data>


2013-04-23 16:29:00,059 common.py 1625 DEBUG:
============================================================================

2013-04-23 16:29:00,059 common.py 1632 INFO: FIREHOSE LOG: logbuf@0xF801E5C4 fh@0xF801B4E8
2013-04-23 16:29:00,059 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 16:29:00,059 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 16:29:00,075 common.py 1343 DEBUG:           <==(channel data) 173 NEW BYTES READ FROM CHANNEL
        Truncating 173 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        22 74 72 75 65 22 20 2F 3E 3C 2F 64 61 74 61 3E         "true" /></data>
(sha256 28d02b3f9f3da9966a5c18b87266bd582e674d0f8d6864a42f4edba4783945df)


2013-04-23 16:29:00,075 common.py 1621 DEBUG:
============================================================================
2013-04-23 16:29:00,075 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 82 bytes) -
RX_Buffer still holds 91 bytes:
2013-04-23 16:29:00,075 common.py 1623 DEBUG:
============================================================================
2013-04-23 16:29:00,075 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
```


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```
<log value="start 0, num 1" />
</data>


2013-04-23 16:29:00,075 common.py 1625 DEBUG:
==============================================================================

2013-04-23 16:29:00,075 common.py 1632 INFO: FIREHOSE LOG: start 0, num 1
2013-04-23 16:29:00,075 common.py 1621 DEBUG:
==============================================================================
2013-04-23 16:29:00,075 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 91 bytes) -
RX Buffer still holds 0 bytes:
2013-04-23 16:29:00,075 common.py 1623 DEBUG:
==============================================================================
2013-04-23 16:29:00,075 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" rawmode="true" />
</data>


2013-04-23 16:29:00,075 common.py 1625 DEBUG:
==============================================================================

2013-04-23 16:29:00,075 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 16:29:00,075 common.py 1476 DEBUG: FIREHOSE: GetAttrib("rawmode")=true
2013-04-23 16:29:00,075 firehose.py 1198 INFO:
FIREHOSE: Target is ready for raw data
2013-04-23 16:29:00,075 common.py 2059 INFO:

        Looking for 'hello world.txt'  <--- LOOKING FOR THIS FILE

2013-04-23 16:29:00,075 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\hello_world.txt (13 B) (1 sectors)

2013-04-23 16:29:00,075 firehose.py 1329 INFO:
FIREHOSE: SendFileAsRawData('D:\Dropbox\zenos paradox\hello world.txt',NumSectors=1) and
MaxPayloadSizeToTargetInBytes=131072
2013-04-23 16:29:00,075 firehose.py 1364 INFO: TotalStart Time = 1366759740.076000
2013-04-23 16:29:00,075 firehose.py 1392 DEBUG: Just padded 499 zeros before sending
2013-04-23 16:29:00,075 firehose.py 1394 DEBUG:
(002) (H001) FIREHOSE: SendRawData(512 bytes, NumSectors Remaining=1) (on the channel)
2013-04-23 16:29:00,075 common.py 1859 DEBUG: SendRawData(512 bytes)
2013-04-23 16:29:00,075 common.py 628 INFO: (002) (H001) SendRawData(00512 bytes)
2013-04-23 16:29:00,075 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:00,075 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 512 bytes TO BE SENT CHANNEL
(P0002) (H0001)
2013-04-23 16:29:00,075 common.py 782 DEBUG:

        Truncating 512 bytes
        68 65 6C 6C 6F 20 77 6F 72 6C 64 0D 0A 00 00 00         hello world.....
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 6286949049c246ff92b9144abcc0030702f41aa28120c54083de678bb9497167)


2013-04-23 16:29:00,075 firehose.py 1419 DEBUG: Length of str data is 512
2013-04-23 16:29:00,075 firehose.py 1420 DEBUG: NumSectors is 1
2013-04-23 16:29:00,075 firehose.py 1431 DEBUG: 1 SectorsWritten and 0 NumSectors to go
2013-04-23 16:29:00,075 firehose.py 1450 INFO: COMPLETE: Elapsed Time: 0.00000 (0.0000KBps) [488.2813MBps]

2013-04-23 16:29:00,075 firehose.py 1236 INFO: DONE sending 'D:\Dropbox\zenos_paradox\hello_world.txt' as RAW
Data,
        looking for ACK to see if it was received correctly!
2013-04-23 16:29:00,075 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX Buffer holds 0 bytes
2013-04-23 16:29:00,075 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 16:29:00,075 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 16:29:00,091 common.py 1343 DEBUG:           <==(channel data) 178 NEW BYTES READ FROM CHANNEL
        Truncating 178 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        66 61 6C 73 65 22 20 2F 3E 3C 2F 64 61 74 61 3E         false" /></data>
(sha256 30fe553e61aea0bfc6c1ae1bf7090982bfe33a8e00c6f00a6b3a0d88d4217584)


2013-04-23 16:29:00,091 common.py 1621 DEBUG:
==============================================================================
```


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```
2013-04-23 16:29:00,091 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 86 bytes) -
RX_Buffer still holds 92 bytes:
2013-04-23 16:29:00,091 common.py 1623 DEBUG:
==============================================================================
2013-04-23 16:29:00,091 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Finished address 1" />
</data>


2013-04-23 16:29:00,091 common.py 1625 DEBUG:
==============================================================================

2013-04-23 16:29:00,091 common.py 1632 INFO: FIREHOSE LOG: Finished address 1
2013-04-23 16:29:00,091 common.py 1621 DEBUG:
==============================================================================
2013-04-23 16:29:00,091 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 92 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 16:29:00,091 common.py 1623 DEBUG:
==============================================================================
2013-04-23 16:29:00,091 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" rawmode="false" />
</data>


2013-04-23 16:29:00,091 common.py 1625 DEBUG:
==============================================================================

2013-04-23 16:29:00,091 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 16:29:00,091 firehose.py 1260 INFO:
FIREHOSE: Target wrote 'D:\Dropbox\zenos_paradox\hello_world.txt' successfully
2013-04-23 16:29:00,091 firehose.py 703 INFO:
(003) (H002) FIREHOSE: Sending SetBootableStorageDrive
2013-04-23 16:29:00,091 common.py 1846 DEBUG: SendString(76 bytes)
2013-04-23 16:29:00,091 common.py 1847 DEBUG:
*********************************************************************

<?xml version="1.0" ?>
<data>
<setbootablestoragedrive value="0" />
</data>

2013-04-23 16:29:00,091 common.py 1848 DEBUG:
*********************************************************************
2013-04-23 16:29:00,091 common.py 628 INFO: (003) (H002) SendString (00076 bytes)  <setbootablestoragedrive
2013-04-23 16:29:00,091 common.py 766 DEBUG:
*********************************************************************
2013-04-23 16:29:00,091 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 76 bytes TO BE SENT CHANNEL
(P0003) (H0002)
2013-04-23 16:29:00,091 common.py 782 DEBUG:

        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 73         .0" ?>.<data>.<s
        65 74 62 6F 6F 74 61 62 6C 65 73 74 6F 72 61 67         etbootablestorag
        65 64 72 69 76 65 20 76 61 6C 75 65 3D 22 30 22         edrive value="0"
        20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A                      />.</data>.
(sha256 4312df6c048066938cbb38aa69dac897a42e26d6e41adf118a2466e94fc163ae)


2013-04-23 16:29:00,091 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX Buffer holds 0 bytes
2013-04-23 16:29:00,091 common.py 1583 DEBUG: FIREHOSE: RX Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 16:29:00,091 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 16:29:00,107 common.py 1343 DEBUG:           <==(channel data) 168 NEW BYTES READ FROM CHANNEL
        Truncating 168 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        3D 22 41 43 4B 22 20 2F 3E 3C 2F 64 61 74 61 3E         ="ACK" /></data>
(sha256 92ee940e4e7892b00123b1b03ef8acedc38618020ba84d112dbc66f03c238b1d)


2013-04-23 16:29:00,107 common.py 1621 DEBUG:
==============================================================================
2013-04-23 16:29:00,107 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 92 bytes) -
RX_Buffer still holds 76 bytes:
```


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```
2013-04-23 16:29:00,107 common.py 1623 DEBUG:
==============================================================================
2013-04-23 16:29:00,107 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Set bootable drive to 0." />
</data>


2013-04-23 16:29:00,107 common.py 1625 DEBUG:
==============================================================================

2013-04-23 16:29:00,107 common.py 1632 INFO: FIREHOSE LOG: Set bootable drive to 0.
2013-04-23 16:29:00,107 common.py 1621 DEBUG:
==============================================================================
2013-04-23 16:29:00,107 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 16:29:00,107 common.py 1623 DEBUG:
==============================================================================
2013-04-23 16:29:00,107 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 16:29:00,107 common.py 1625 DEBUG:
==============================================================================

2013-04-23 16:29:00,107 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 16:29:00,107 firehose.py 723 INFO: Got the ACK, Bootable Storage Drive set successfully
2013-04-23 16:29:00,107 firehose.py 508 INFO:
(004) (H003) FIREHOSE: Sending Reset
2013-04-23 16:29:00,107 common.py 1846 DEBUG: SendString(62 bytes)
2013-04-23 16:29:00,107 common.py 1847 DEBUG:
******************************************************************************

<?xml version="1.0" ?>
<data>
<power value="reset" />
</data>

2013-04-23 16:29:00,107 common.py 1848 DEBUG:
******************************************************************************
2013-04-23 16:29:00,107 common.py 628 INFO: (004) (H003) SendString (00062 bytes)  <power value="reset" /> <
2013-04-23 16:29:00,107 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:00,107 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 62 bytes TO BE SENT CHANNEL
(P0004) (H0003)
2013-04-23 16:29:00,107 common.py 782 DEBUG:

        Showing 62 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 70         .0" ?>.<data>.<p
        6F 77 65 72 20 76 61 6C 75 65 3D 22 72 65 73 65         ower value="rese
        74 22 20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A               t" />.</data>.
(sha256 cfbcefe68ef764dfc1ba5c334389826d5ea757c7571f3af669236b6c5e0ce8c0)


2013-04-23 16:29:00,107 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 16:29:00,107 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 16:29:00,107 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 16:29:00,121 common.py 1343 DEBUG:          <==(channel data) 76 NEW BYTES READ FROM CHANNEL
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54         .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65         F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43         sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                     K" /></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 16:29:00,121 common.py 1621 DEBUG:
==============================================================================
2013-04-23 16:29:00,121 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX Buffer still holds 0 bytes:
2013-04-23 16:29:00,121 common.py 1623 DEBUG:
==============================================================================
```


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```
2013-04-23 16:29:00,121 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 16:29:00,121 common.py 1625 DEBUG:
================================================================================

2013-04-23 16:29:00,121 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 16:29:00,121 firehose.py 147 INFO:
2013-04-23 16:29:00,121 firehose.py 148 INFO:     | |
2013-04-23 16:29:00,121 firehose.py 149 INFO:   __| | ___  _ __  ___
2013-04-23 16:29:00,121 firehose.py 150 INFO:  / _` |/ _ \| '_ \ / _ \
2013-04-23 16:29:00,121 firehose.py 151 INFO: | (_| | (_) | | | |  __/
2013-04-23 16:29:00,121 firehose.py 152 INFO:  \__,_|\___/|_| |_|\___|
2013-04-23 16:29:00,121 firehose.py 154 INFO: All Finished Successfully
2013-04-23 16:29:00,121 firehose.py 155 INFO: All Finished Successfully
2013-04-23 16:29:00,121 firehose.py 156 INFO: All Finished Successfully
2013-04-23 16:29:00,278 common.py 975 DEBUG: device_close() Port closed successfully
```

QUALCOMM®
2013.08.09 at 00:19:14 PDT
mingmao.luo-tcl.com
210.83.69.2

11.2 Transferring dummy.bin (2MB file of zeros)

```
2013-04-23 16:29:44,983 zeno.py 470 INFO: ParseCommandLineOptions()
2013-04-23 16:29:45,002 zeno.py 683 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 16:29:45,003 zeno.py 684 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 16:29:45,003 zeno.py 685 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 16:29:48,005 common.py 2059 INFO:

        Looking for 'lsusb.py'  <--- LOOKING FOR THIS FILE

2013-04-23 16:29:48,006 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\lsusb.py (14.63 KB) (30 sectors)

2013-04-23 16:29:48,118 firehose.py 88 INFO: show_states() See log for '4' Firehose Operations:
2013-04-23 16:29:48,118 firehose.py 90 INFO: 0) <function Configure at 0x02298170>                      kwargs:
{}
2013-04-23 16:29:48,119 firehose.py 90 INFO: 1) <function SendFile at 0x02298230>                       kwargs:
{'filename': 'dummy.bin'}
2013-04-23 16:29:48,119 firehose.py 90 INFO: 2) <function SetBootableStorageDrive at 0x022980F0>        kwargs:
{'SET_BOOTABLE_STORAGE_DRIVE_NUMBER': 0}
2013-04-23 16:29:48,119 firehose.py 90 INFO: 3) <function Reset at 0x02297FB0>                          kwargs:
{}
2013-04-23 16:29:48,119 firehose.py 116 INFO:
Ensuring file exists before attempting programming
2013-04-23 16:29:48,121 common.py 2059 INFO:

        Looking for 'dummy.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 16:29:48,121 common.py 2064 INFO:
        **Found D:\Dropbox\zenos paradox\dummy.bin (2.00 MB) (4096 sectors)

2013-04-23 16:29:48,122 common.py 666 INFO: ser.portstr         \\.\COM4
2013-04-23 16:29:48,122 common.py 667 INFO: ser.parity          N
2013-04-23 16:29:48,122 common.py 668 INFO: ser.baudrate        921600
2013-04-23 16:29:48,122 common.py 669 INFO: ser.bytesize        8
2013-04-23 16:29:48,124 common.py 670 INFO: ser.stopbits        1

2013-04-23 16:29:48,124 common.py 678 INFO: Port \\.\COM4 opened

2013-04-23 16:29:48,124 firehose.py 123 INFO:  _                 _
2013-04-23 16:29:48,124 firehose.py 124 INFO: | |               (_)
2013-04-23 16:29:48,125 firehose.py 125 INFO: | |
2013-04-23 16:29:48,125 firehose.py 126 INFO: | '  \ /   \/  ` | | '  \
2013-04-23 16:29:48,125 firehose.py 127 INFO: | | ) |    / ( | | | | | |
2013-04-23 16:29:48,125 firehose.py 128 INFO: |_.__/ \___|\__, |_|_| |_|
2013-04-23 16:29:48,125 firehose.py 129 INFO:              __/ |
2013-04-23 16:29:48,125 firehose.py 130 INFO:             |___/
2013-04-23 16:29:48,125 firehose.py 831 INFO:
(000) (H-001) FIREHOSE: Sending THIS Configure
2013-04-23 16:29:48,125 common.py 1846 DEBUG: SendString(160 bytes)
2013-04-23 16:29:48,125 common.py 1847 DEBUG:
****************************************************************************

<?xml version="1.0" ?>
<data>
<configure MaxDigestTableSizeInBytes="4096" MemoryName="eMMC" TargetName="8960"
MaxPayloadSizeToTargetInBytes="131072" />
</data>

2013-04-23 16:29:48,127 common.py 1848 DEBUG:
****************************************************************************
2013-04-23 16:29:48,127 common.py 628 INFO: (000) (H-001) SendString (00160 bytes)  <configure MaxDigestTable
2013-04-23 16:29:48,127 common.py 766 DEBUG:
****************************************************************************
2013-04-23 16:29:48,127 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 160 bytes TO BE SENT CHANNEL
(P0000) (H-0001)
2013-04-23 16:29:48,127 common.py 782 DEBUG:

        Truncating 160 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        30 37 32 22 20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A         072" />.</data>.
(sha256 d481269a5c98855255e22c13a086186a2b16eac959ca48e6c24b80598376704e)
```


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```
2013-04-23 16:29:48,127 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 16:29:48,128 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 16:29:48,128 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 16:29:48,138 common.py 1343 DEBUG:           <==(channel data) 398 NEW BYTES READ FROM CHANNEL
        Truncating 398 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        31 42 34 45 38 22 20 2F 3E 3C 2F 64 61 74 61 3E         1B4E8" /></data>
(sha256 5206fde39655f3d1b443e10b5ac85c39eb606d30febecff7f71b67a2940417f8)


2013-04-23 16:29:48,141 common.py 1621 DEBUG:
==============================================================================
2013-04-23 16:29:48,141 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 299 bytes) -
RX_Buffer still holds 99 bytes:
2013-04-23 16:29:48,141 common.py 1623 DEBUG:
==============================================================================
2013-04-23 16:29:48,141 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" MinVersionSupported="1" MemoryName="eMMC" MaxPayloadSizeFromTargetInBytes="4096"
MaxPayloadSizeToTargetInBytes="131072" MaxPayloadSizeToTargetInBytesSupported="131072" MaxXMLSizeInBytes="4096"
Version="1" TargetName="8974" />
</data>


2013-04-23 16:29:48,141 common.py 1625 DEBUG:
==============================================================================

2013-04-23 16:29:48,141 firehose.py 743 INFO: FIREHOSE: Parsing the CONFIGURE response
2013-04-23 16:29:48,142 common.py 1476 DEBUG: FIREHOSE: GetAttrib("Version")=1
2013-04-23 16:29:48,142 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MinVersionSupported")=1
2013-04-23 16:29:48,142 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxXMLSizeInBytes")=4096
2013-04-23 16:29:48,142 common.py 1476 DEBUG: FIREHOSE:
GetAttrib("MaxPayloadSizeToTargetInBytesSupported")=131072
2013-04-23 16:29:48,142 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxPayloadSizeToTargetInBytes")=131072
2013-04-23 16:29:48,142 common.py 1476 DEBUG: FIREHOSE: GetAttrib("TargetName")=8974
2013-04-23 16:29:48,142 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MemoryName")=eMMC
2013-04-23 16:29:48,142 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxPayloadSizeFromTargetInBytes")=4096
2013-04-23 16:29:48,142 common.py 2059 INFO:

        Looking for 'dummy.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 16:29:48,144 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\dummy.bin (2.00 MB) (4096 sectors)

2013-04-23 16:29:48,144 firehose.py 1295 INFO: Filename: 'D:\Dropbox\zenos_paradox\dummy.bin' (2.00 MB)
2013-04-23 16:29:48,145 firehose.py 1301 INFO:
FIREHOSE: SingleFile()
2013-04-23 16:29:48,145 firehose.py 1302 INFO:
(001) (H000) FIREHOSE: Sending a 'single file' rawprogram.xml for 'D:\Dropbox\zenos paradox\dummy.bin'
2013-04-23 16:29:48,147 common.py 2059 INFO:

        Looking for 'dummy.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 16:29:48,148 common.py 2064 INFO:
        **Found D:\Dropbox\zenos paradox\dummy.bin (2.00 MB) (4096 sectors)

2013-04-23 16:29:48,148 firehose.py 997 INFO: Filename: 'D:\Dropbox\zenos_paradox\dummy.bin' (2.00 MB)
2013-04-23 16:29:48,151 firehose.py 1086 INFO:
FIREHOSE: SendXMLFile(175 bytes)
2013-04-23 16:29:48,151 firehose.py 1087 INFO:
(001) (H000) FIREHOSE: SendXMLFile('None')
2013-04-23 16:29:48,151 common.py 1846 DEBUG: SendString(175 bytes)
2013-04-23 16:29:48,151 common.py 1847 DEBUG:
******************************************************************************

<?xml version="1.0" ?>
<data>
  <program SECTOR SIZE IN BYTES="512" filename="dummy.bin" num partition sectors="4096"
physical_partition_number="0" start_sector="0"/>
</data>

2013-04-23 16:29:48,151 common.py 1848 DEBUG:
******************************************************************************
2013-04-23 16:29:48,151 common.py 628 INFO: (001) (H000) SendString (00175 bytes)    <program SECTOR_SIZE_IN
2013-04-23 16:29:48,151 common.py 766 DEBUG:
******************************************************************************
```


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```
2013-04-23 16:29:48,151 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 175 bytes TO BE SENT CHANNEL
(P0001) (H0000)
2013-04-23 16:29:48,153 common.py 782 DEBUG:

        Truncating 175 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        72 3D 22 30 22 2F 3E 0A 3C 2F 64 61 74 61 3E 0A         r="0"/>.</data>.
(sha256 c0952904564126cf174fc313a386d69e9394221056d8b38359581743b9b0ac5f)


2013-04-23 16:29:48,153 firehose.py 1266 INFO: FIREHOSE: <data> tag found, ignoring
2013-04-23 16:29:48,153 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX Buffer holds 99 bytes
2013-04-23 16:29:48,154 common.py 1621 DEBUG:
==============================================================================
2013-04-23 16:29:48,154 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 99 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 16:29:48,154 common.py 1623 DEBUG:
==============================================================================
2013-04-23 16:29:48,154 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="logbuf@0xF801E5C4 fh@0xF801B4E8" />
</data>


2013-04-23 16:29:48,154 common.py 1625 DEBUG:
==============================================================================

2013-04-23 16:29:48,154 common.py 1632 INFO: FIREHOSE LOG: logbuf@0xF801E5C4 fh@0xF801B4E8
2013-04-23 16:29:48,154 common.py 1583 DEBUG: FIREHOSE: RX Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 16:29:48,154 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 16:29:48,164 common.py 1343 DEBUG:           <==(channel data) 176 NEW BYTES READ FROM CHANNEL
        Truncating 176 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        22 74 72 75 65 22 20 2F 3E 3C 2F 64 61 74 61 3E         "true" /></data>
(sha256 b645b2de4a3e8f775ed872eb9b4ffcc6919d5687055095dc988760d327bfd862)


2013-04-23 16:29:48,164 common.py 1621 DEBUG:
==============================================================================
2013-04-23 16:29:48,164 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 85 bytes) -
RX_Buffer still holds 91 bytes:
2013-04-23 16:29:48,164 common.py 1623 DEBUG:
==============================================================================
2013-04-23 16:29:48,164 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="start 0, num 4096" />
</data>


2013-04-23 16:29:48,164 common.py 1625 DEBUG:
==============================================================================

2013-04-23 16:29:48,164 common.py 1632 INFO: FIREHOSE LOG: start 0, num 4096
2013-04-23 16:29:48,165 common.py 1621 DEBUG:
==============================================================================
2013-04-23 16:29:48,165 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 91 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 16:29:48,165 common.py 1623 DEBUG:
==============================================================================
2013-04-23 16:29:48,165 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" rawmode="true" />
</data>


2013-04-23 16:29:48,167 common.py 1625 DEBUG:
==============================================================================

2013-04-23 16:29:48,167 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 16:29:48,167 common.py 1476 DEBUG: FIREHOSE: GetAttrib("rawmode")=true
2013-04-23 16:29:48,167 firehose.py 1198 INFO:
FIREHOSE: Target is ready for raw data
```


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```
2013-04-23 16:29:48,167 common.py 2059 INFO:

        Looking for 'dummy.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 16:29:48,167 common.py 2064 INFO:
        **Found D:\Dropbox\zenos paradox\dummy.bin (2.00 MB) (4096 sectors)

2013-04-23 16:29:48,168 firehose.py 1329 INFO:
FIREHOSE: SendFileAsRawData('D:\Dropbox\zenos_paradox\dummy.bin',NumSectors=4096) and
MaxPayloadSizeToTargetInBytes=131072
2013-04-23 16:29:48,170 firehose.py 1364 INFO: TotalStart Time = 1366759788.170000
2013-04-23 16:29:48,187 firehose.py 1394 DEBUG:
(002) (H001) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=4096) (on the channel)
2013-04-23 16:29:48,187 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,188 common.py 628 INFO: (002) (H001) SendRawData(131072 bytes)
2013-04-23 16:29:48,188 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:48,188 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0002) (H0001)
2013-04-23 16:29:48,200 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00          ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00          ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,207 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,207 firehose.py 1420 DEBUG: NumSectors is 4096
2013-04-23 16:29:48,207 firehose.py 1431 DEBUG: 256 SectorsWritten and 3840 NumSectors to go
2013-04-23 16:29:48,207 firehose.py 1437 INFO: 06% (elapsed=0.0380)       3.29MBps (WRITE)
2013-04-23 16:29:48,213 firehose.py 1394 DEBUG:
(003) (H002) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=3840) (on the channel)
2013-04-23 16:29:48,213 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,213 common.py 628 INFO: (003) (H002) SendRawData(131072 bytes)
2013-04-23 16:29:48,213 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:48,213 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0003) (H0002)
2013-04-23 16:29:48,223 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00          ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00          ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,230 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,230 firehose.py 1420 DEBUG: NumSectors is 3840
2013-04-23 16:29:48,230 firehose.py 1431 DEBUG: 256 SectorsWritten and 3584 NumSectors to go
2013-04-23 16:29:48,230 firehose.py 1437 INFO: 12% (elapsed=0.0210)       5.95MBps (WRITE)
2013-04-23 16:29:48,230 firehose.py 1394 DEBUG:
(004) (H003) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=3584) (on the channel)
2013-04-23 16:29:48,230 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,230 common.py 628 INFO: (004) (H003) SendRawData(131072 bytes)
2013-04-23 16:29:48,232 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:48,232 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0004) (H0003)
2013-04-23 16:29:48,243 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00          ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00          ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,288 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,288 firehose.py 1420 DEBUG: NumSectors is 3584
2013-04-23 16:29:48,288 firehose.py 1431 DEBUG: 256 SectorsWritten and 3328 NumSectors to go
2013-04-23 16:29:48,289 firehose.py 1437 INFO: 18% (elapsed=0.0580)       2.16MBps (WRITE)
2013-04-23 16:29:48,289 firehose.py 1394 DEBUG:
(005) (H004) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=3328) (on the channel)
2013-04-23 16:29:48,289 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,289 common.py 628 INFO: (005) (H004) SendRawData(131072 bytes)
2013-04-23 16:29:48,289 common.py 766 DEBUG:
******************************************************************************
```


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```
2013-04-23 16:29:48,289 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0005) (H0004)
2013-04-23 16:29:48,305 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,312 firehose.py 1419 DEBUG: Length of str data is 131072
2013-04-23 16:29:48,312 firehose.py 1420 DEBUG: NumSectors is 3328
2013-04-23 16:29:48,312 firehose.py 1431 DEBUG: 256 SectorsWritten and 3072 NumSectors to go
2013-04-23 16:29:48,312 firehose.py 1437 INFO: 25% (elapsed=0.0220)       5.68MBps (WRITE)
2013-04-23 16:29:48,312 firehose.py 1394 DEBUG:
(006) (H005) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=3072) (on the channel)
2013-04-23 16:29:48,312 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,313 common.py 628 INFO: (006) (H005) SendRawData(131072 bytes)
2013-04-23 16:29:48,313 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:48,313 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0006) (H0005)
2013-04-23 16:29:48,323 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,331 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,331 firehose.py 1420 DEBUG: NumSectors is 3072
2013-04-23 16:29:48,331 firehose.py 1431 DEBUG: 256 SectorsWritten and 2816 NumSectors to go
2013-04-23 16:29:48,331 firehose.py 1437 INFO: 31% (elapsed=0.0180)       6.94MBps (WRITE)
2013-04-23 16:29:48,332 firehose.py 1394 DEBUG:
(007) (H006) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=2816) (on the channel)
2013-04-23 16:29:48,332 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,332 common.py 628 INFO: (007) (H006) SendRawData(131072 bytes)
2013-04-23 16:29:48,332 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:48,332 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0007) (H0006)
2013-04-23 16:29:48,342 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,348 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,348 firehose.py 1420 DEBUG: NumSectors is 2816
2013-04-23 16:29:48,348 firehose.py 1431 DEBUG: 256 SectorsWritten and 2560 NumSectors to go
2013-04-23 16:29:48,348 firehose.py 1437 INFO: 37% (elapsed=0.0170)       7.35MBps (WRITE)
2013-04-23 16:29:48,349 firehose.py 1394 DEBUG:
(008) (H007) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=2560) (on the channel)
2013-04-23 16:29:48,349 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,349 common.py 628 INFO: (008) (H007) SendRawData(131072 bytes)
2013-04-23 16:29:48,349 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:48,349 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0008) (H0007)
2013-04-23 16:29:48,361 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,367 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,367 firehose.py 1420 DEBUG: NumSectors is 2560
2013-04-23 16:29:48,367 firehose.py 1431 DEBUG: 256 SectorsWritten and 2304 NumSectors to go
2013-04-23 16:29:48,368 firehose.py 1437 INFO: 43% (elapsed=0.0170)       7.35MBps (WRITE)
2013-04-23 16:29:48,368 firehose.py 1394 DEBUG:
(009) (H008) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=2304) (on the channel)
2013-04-23 16:29:48,368 common.py 1859 DEBUG: SendRawData(131072 bytes)
```


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```
2013-04-23 16:29:48,368 common.py 628 INFO: (009) (H008) SendRawData(131072 bytes)
2013-04-23 16:29:48,368 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 16:29:48,368 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0009) (H0008)
2013-04-23 16:29:48,380 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,385 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,385 firehose.py 1420 DEBUG: NumSectors is 2304
2013-04-23 16:29:48,385 firehose.py 1431 DEBUG: 256 SectorsWritten and 2048 NumSectors to go
2013-04-23 16:29:48,385 firehose.py 1437 INFO: 50% (elapsed=0.0180)       6.94MBps (WRITE)
2013-04-23 16:29:48,387 firehose.py 1394 DEBUG:
(010) (H009) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=2048) (on the channel)
2013-04-23 16:29:48,387 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,387 common.py 628 INFO: (010) (H009) SendRawData(131072 bytes)
2013-04-23 16:29:48,387 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 16:29:48,388 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0010) (H0009)
2013-04-23 16:29:48,398 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,404 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,404 firehose.py 1420 DEBUG: NumSectors is 2048
2013-04-23 16:29:48,404 firehose.py 1431 DEBUG: 256 SectorsWritten and 1792 NumSectors to go
2013-04-23 16:29:48,404 firehose.py 1437 INFO: 56% (elapsed=0.0180)       6.94MBps (WRITE)
2013-04-23 16:29:48,405 firehose.py 1394 DEBUG:
(011) (H010) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=1792) (on the channel)
2013-04-23 16:29:48,405 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,405 common.py 628 INFO: (011) (H010) SendRawData(131072 bytes)
2013-04-23 16:29:48,405 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 16:29:48,405 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0011) (H0010)
2013-04-23 16:29:48,417 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,423 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,423 firehose.py 1420 DEBUG: NumSectors is 1792
2013-04-23 16:29:48,423 firehose.py 1431 DEBUG: 256 SectorsWritten and 1536 NumSectors to go
2013-04-23 16:29:48,423 firehose.py 1437 INFO: 62% (elapsed=0.0170)       7.35MBps (WRITE)
2013-04-23 16:29:48,424 firehose.py 1394 DEBUG:
(012) (H011) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=1536) (on the channel)
2013-04-23 16:29:48,424 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,424 common.py 628 INFO: (012) (H011) SendRawData(131072 bytes)
2013-04-23 16:29:48,424 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 16:29:48,424 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0012) (H0011)
2013-04-23 16:29:48,434 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,440 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,440 firehose.py 1420 DEBUG: NumSectors is 1536
2013-04-23 16:29:48,440 firehose.py 1431 DEBUG: 256 SectorsWritten and 1280 NumSectors to go
2013-04-23 16:29:48,440 firehose.py 1437 INFO: 68% (elapsed=0.0170)       7.35MBps (WRITE)
```


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```
2013-04-23 16:29:48,441 firehose.py 1394 DEBUG:
(013) (H012) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=1280) (on the channel)
2013-04-23 16:29:48,441 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,441 common.py 628 INFO: (013) (H012) SendRawData(131072 bytes)
2013-04-23 16:29:48,441 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:48,441 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0013) (H0012)
2013-04-23 16:29:48,453 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,459 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,459 firehose.py 1420 DEBUG: NumSectors is 1280
2013-04-23 16:29:48,459 firehose.py 1431 DEBUG: 256 SectorsWritten and 1024 NumSectors to go
2013-04-23 16:29:48,459 firehose.py 1437 INFO: 75% (elapsed=0.0170)       7.35MBps (WRITE)
2013-04-23 16:29:48,460 firehose.py 1394 DEBUG:
(014) (H013) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=1024) (on the channel)
2013-04-23 16:29:48,460 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,460 common.py 628 INFO: (014) (H013) SendRawData(131072 bytes)
2013-04-23 16:29:48,460 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:48,460 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0014) (H0013)
2013-04-23 16:29:48,470 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,476 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,476 firehose.py 1420 DEBUG: NumSectors is 1024
2013-04-23 16:29:48,476 firehose.py 1431 DEBUG: 256 SectorsWritten and 768 NumSectors to go
2013-04-23 16:29:48,476 firehose.py 1437 INFO: 81% (elapsed=0.0170)       7.35MBps (WRITE)
2013-04-23 16:29:48,476 firehose.py 1394 DEBUG:
(015) (H014) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=768) (on the channel)
2013-04-23 16:29:48,476 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,477 common.py 628 INFO: (015) (H014) SendRawData(131072 bytes)
2013-04-23 16:29:48,477 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:48,477 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0015) (H0014)
2013-04-23 16:29:48,487 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,493 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,493 firehose.py 1420 DEBUG: NumSectors is 768
2013-04-23 16:29:48,493 firehose.py 1431 DEBUG: 256 SectorsWritten and 512 NumSectors to go
2013-04-23 16:29:48,493 firehose.py 1437 INFO: 87% (elapsed=0.0170)       7.35MBps (WRITE)
2013-04-23 16:29:48,494 firehose.py 1394 DEBUG:
(016) (H015) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=512) (on the channel)
2013-04-23 16:29:48,494 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,494 common.py 628 INFO: (016) (H015) SendRawData(131072 bytes)
2013-04-23 16:29:48,494 common.py 766 DEBUG:
******************************************************************************
2013-04-23 16:29:48,494 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0016) (H0015)
2013-04-23 16:29:48,506 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,512 firehose.py 1419 DEBUG: Length of str_data is 131072
```


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```
2013-04-23 16:29:48,512 firehose.py 1420 DEBUG: NumSectors is 512
2013-04-23 16:29:48,512 firehose.py 1431 DEBUG: 256 SectorsWritten and 256 NumSectors to go
2013-04-23 16:29:48,512 firehose.py 1437 INFO: 93% (elapsed=0.0170)       7.35MBps (WRITE)
2013-04-23 16:29:48,512 firehose.py 1394 DEBUG:
(017) (H016) FIREHOSE: SendRawData(131072 bytes, NumSectors Remaining=256) (on the channel)
2013-04-23 16:29:48,512 common.py 1859 DEBUG: SendRawData(131072 bytes)
2013-04-23 16:29:48,512 common.py 628 INFO: (017) (H016) SendRawData(131072 bytes)
2013-04-23 16:29:48,512 common.py 766 DEBUG:
****************************************************************************
2013-04-23 16:29:48,513 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 131072 bytes TO BE SENT
CHANNEL (P0017) (H0016)
2013-04-23 16:29:48,523 common.py 782 DEBUG:

        Truncating 131072 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 fa43239bcee7b97ca62f007cc68487560a39e19f74f3dde7486db3f98df8e471)


2013-04-23 16:29:48,529 firehose.py 1419 DEBUG: Length of str_data is 131072
2013-04-23 16:29:48,529 firehose.py 1420 DEBUG: NumSectors is 256
2013-04-23 16:29:48,529 firehose.py 1431 DEBUG: 256 SectorsWritten and 0 NumSectors to go
2013-04-23 16:29:48,529 firehose.py 1437 INFO: 100% (elapsed=0.0170)       7.35MBps (WRITE)
2013-04-23 16:29:48,529 firehose.py 1450 INFO: COMPLETE: Elapsed Time: 0.35900 (5704.7359KBps) [5.5710MBps]

2013-04-23 16:29:48,529 firehose.py 1236 INFO: DONE sending 'D:\Dropbox\zenos_paradox\dummy.bin' as RAW Data,
        looking for ACK to see if it was received correctly!
2013-04-23 16:29:48,529 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 16:29:48,530 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 16:29:48,530 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 16:29:48,540 common.py 1343 DEBUG:           <==(channel data) 181 NEW BYTES READ FROM CHANNEL
        Truncating 181 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        66 61 6C 73 65 22 20 2F 3E 3C 2F 64 61 74 61 3E         false" /></data>
(sha256 254c52fd9878f3d04a67a62f8c7e20c7e063e6e25d5b9316da18af23e95ee741)


2013-04-23 16:29:48,540 common.py 1621 DEBUG:
============================================================================
2013-04-23 16:29:48,540 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 89 bytes) -
RX_Buffer still holds 92 bytes:
2013-04-23 16:29:48,540 common.py 1623 DEBUG:
============================================================================
2013-04-23 16:29:48,540 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Finished address 4096" />
</data>


2013-04-23 16:29:48,540 common.py 1625 DEBUG:
============================================================================

2013-04-23 16:29:48,540 common.py 1632 INFO: FIREHOSE LOG: Finished address 4096
2013-04-23 16:29:48,542 common.py 1621 DEBUG:
============================================================================
2013-04-23 16:29:48,542 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 92 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 16:29:48,542 common.py 1623 DEBUG:
============================================================================
2013-04-23 16:29:48,542 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" rawmode="false" />
</data>


2013-04-23 16:29:48,542 common.py 1625 DEBUG:
============================================================================

2013-04-23 16:29:48,542 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 16:29:48,542 firehose.py 1260 INFO:
FIREHOSE: Target wrote 'D:\Dropbox\zenos_paradox\dummy.bin' successfully
2013-04-23 16:29:48,542 firehose.py 703 INFO:
(018) (H017) FIREHOSE: Sending SetBootableStorageDrive
2013-04-23 16:29:48,542 common.py 1846 DEBUG: SendString(76 bytes)
```


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```
2013-04-23 16:29:48,542 common.py 1847 DEBUG:
*****************************************************************************

<?xml version="1.0" ?>
<data>
<setbootablestoragedrive value="0" />
</data>

2013-04-23 16:29:48,542 common.py 1848 DEBUG:
*****************************************************************************
2013-04-23 16:29:48,542 common.py 628 INFO: (018) (H017) SendString (00076 bytes)  <setbootablestoragedrive
2013-04-23 16:29:48,543 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 16:29:48,543 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 76 bytes TO BE SENT CHANNEL
(P0018) (H0017)
2013-04-23 16:29:48,543 common.py 782 DEBUG:

        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 73         .0" ?>.<data>.<s
        65 74 62 6F 6F 74 61 62 6C 65 73 74 6F 72 61 67         etbootablestorag
        65 64 72 69 76 65 20 76 61 6C 75 65 3D 22 30 22         edrive value="0"
        20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A                      />.</data>.
(sha256 4312df6c048066938cbb38aa69dac897a42e26d6e41adf118a2466e94fc163ae)


2013-04-23 16:29:48,543 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 16:29:48,543 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 16:29:48,543 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 16:29:48,555 common.py 1343 DEBUG:           <==(channel data) 168 NEW BYTES READ FROM CHANNEL
        Truncating 168 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        3D 22 41 43 4B 22 20 2F 3E 3C 2F 64 61 74 61 3E         ="ACK" /></data>
(sha256 92ee940e4e7892b00123b1b03ef8acedc38618020ba84d112dbc66f03c238b1d)


2013-04-23 16:29:48,555 common.py 1621 DEBUG:
=============================================================================
2013-04-23 16:29:48,555 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 92 bytes) -
RX_Buffer still holds 76 bytes:
2013-04-23 16:29:48,555 common.py 1623 DEBUG:
=============================================================================
2013-04-23 16:29:48,555 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Set bootable drive to 0." />
</data>


2013-04-23 16:29:48,555 common.py 1625 DEBUG:
=============================================================================

2013-04-23 16:29:48,555 common.py 1632 INFO: FIREHOSE LOG: Set bootable drive to 0.
2013-04-23 16:29:48,555 common.py 1621 DEBUG:
=============================================================================
2013-04-23 16:29:48,555 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 16:29:48,555 common.py 1623 DEBUG:
=============================================================================
2013-04-23 16:29:48,555 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 16:29:48,555 common.py 1625 DEBUG:
=============================================================================

2013-04-23 16:29:48,555 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 16:29:48,555 firehose.py 723 INFO: Got the ACK, Bootable Storage Drive set successfully
2013-04-23 16:29:48,556 firehose.py 508 INFO:
(019) (H018) FIREHOSE: Sending Reset
2013-04-23 16:29:48,556 common.py 1846 DEBUG: SendString(62 bytes)
2013-04-23 16:29:48,556 common.py 1847 DEBUG:
*****************************************************************************
```


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```
<?xml version="1.0" ?>
<data>
<power value="reset" />
</data>

2013-04-23 16:29:48,556 common.py 1848 DEBUG:
*****************************************************************************
2013-04-23 16:29:48,556 common.py 628 INFO: (019) (H018) SendString (00062 bytes)  <power value="reset" /> <
2013-04-23 16:29:48,556 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 16:29:48,558 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 62 bytes TO BE SENT CHANNEL
(P0019) (H0018)
2013-04-23 16:29:48,558 common.py 782 DEBUG:

        Showing 62 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 70         .0" ?>.<data>.<p
        6F 77 65 72 20 76 61 6C 75 65 3D 22 72 65 73 65         ower value="rese
        74 22 20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A               t" />.</data>.
(sha256 cfbcefe68ef764dfc1ba5c334389826d5ea757c7571f3af669236b6c5e0ce8c0)


2013-04-23 16:29:48,558 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 16:29:48,558 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 16:29:48,558 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 16:29:48,569 common.py 1343 DEBUG:          <==(channel data) 76 NEW BYTES READ FROM CHANNEL
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54         .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65         F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43         sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                     K" /></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 16:29:48,569 common.py 1621 DEBUG:
=============================================================================
2013-04-23 16:29:48,569 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX Buffer still holds 0 bytes:
2013-04-23 16:29:48,569 common.py 1623 DEBUG:
=============================================================================
2013-04-23 16:29:48,569 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 16:29:48,569 common.py 1625 DEBUG:
=============================================================================

2013-04-23 16:29:48,569 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 16:29:48,569 firehose.py 147 INFO:      _
2013-04-23 16:29:48,569 firehose.py 148 INFO:     | |
2013-04-23 16:29:48,569 firehose.py 149 INFO:     | |
2013-04-23 16:29:48,571 firehose.py 150 INFO:  /  ` |/   \| '  \ /   \
2013-04-23 16:29:48,571 firehose.py 151 INFO: | ( | | ( ) | | | |    /
2013-04-23 16:29:48,571 firehose.py 152 INFO:  \__,_|\___/|_| |_|\___|
2013-04-23 16:29:48,572 firehose.py 154 INFO: All Finished Successfully
2013-04-23 16:29:48,572 firehose.py 155 INFO: All Finished Successfully
2013-04-23 16:29:48,572 firehose.py 156 INFO: All Finished Successfully
2013-04-23 16:29:48,573 common.py 975 DEBUG: device_close() Port closed successfully
```


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11.3 Transferring hello_world.txt with VIP

```
2013-04-23 17:46:48,167 zeno.py 470 INFO: ParseCommandLineOptions()
2013-04-23 17:46:48,214 zeno.py 683 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 17:46:48,214 zeno.py 684 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 17:46:48,214 zeno.py 685 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 17:46:51,226 common.py 2059 INFO:

        Looking for 'lsusb.py'  <--- LOOKING FOR THIS FILE

2013-04-23 17:46:51,226 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\lsusb.py (14.63 KB) (30 sectors)

2013-04-23 17:46:51,335 firehose.py 88 INFO: show_states() See log for '4' Firehose Operations:
2013-04-23 17:46:51,335 firehose.py 90 INFO: 0) <function Configure at 0x022881B0>                      kwargs:
{}
2013-04-23 17:46:51,335 firehose.py 90 INFO: 1) <function SendFile at 0x02288270>                       kwargs:
{'filename': 'hello_world.txt'}
2013-04-23 17:46:51,335 firehose.py 90 INFO: 2) <function SetBootableStorageDrive at 0x02288130>        kwargs:
{'SET_BOOTABLE_STORAGE_DRIVE_NUMBER': 0}
2013-04-23 17:46:51,335 firehose.py 90 INFO: 3) <function Reset at 0x02288030>                          kwargs:
{}
2013-04-23 17:46:51,335 firehose.py 116 INFO:
Ensuring file exists before attempting programming
2013-04-23 17:46:51,335 common.py 2059 INFO:

        Looking for 'hello_world.txt'  <--- LOOKING FOR THIS FILE

2013-04-23 17:46:51,335 common.py 2064 INFO:
        **Found D:\Dropbox\zenos paradox\hello world.txt (13 B) (1 sectors)

2013-04-23 17:46:51,335 common.py 666 INFO: ser.portstr         \\.\COM4
2013-04-23 17:46:51,335 common.py 667 INFO: ser.parity          N
2013-04-23 17:46:51,351 common.py 668 INFO: ser.baudrate        921600
2013-04-23 17:46:51,351 common.py 669 INFO: ser.bytesize        8
2013-04-23 17:46:51,351 common.py 670 INFO: ser.stopbits        1

2013-04-23 17:46:51,351 common.py 678 INFO: Port \\.\COM4 opened

2013-04-23 17:46:51,351 firehose.py 123 INFO:  _                 _
2013-04-23 17:46:51,351 firehose.py 124 INFO: | |               (_)
2013-04-23 17:46:51,351 firehose.py 125 INFO: | |
2013-04-23 17:46:51,351 firehose.py 126 INFO: | '  \ /   \/  ` | | '  \
2013-04-23 17:46:51,351 firehose.py 127 INFO: | | ) |    / ( | | | | | |
2013-04-23 17:46:51,351 firehose.py 128 INFO: |_.__/ \___|\__, |_|_| |_|
2013-04-23 17:46:51,351 firehose.py 129 INFO:              __/ |
2013-04-23 17:46:51,351 firehose.py 130 INFO:             |___/
2013-04-23 17:46:51,351 firehose.py 324 INFO: FIREHOSE: Sending digitally signed first DIGEST TABLE
2013-04-23 17:46:51,351 firehose.py 332 INFO: start_sector '0'
2013-04-23 17:46:51,351 common.py 2059 INFO:

        Looking for 'DigestsToSign.bin.mbn'  <--- LOOKING FOR THIS FILE

2013-04-23 17:46:51,351 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\DigestsToSign.bin.mbn (6.48 KB) (13 sectors)

2013-04-23 17:46:51,351 firehose.py 340 INFO: Filename: 'D:\Dropbox\zenos paradox\DigestsToSign.bin.mbn' (6.48
KB)
2013-04-23 17:46:51,351 firehose.py 348 INFO: FileSizeInSectors 13
2013-04-23 17:46:51,351 firehose.py 349 INFO: file_sector_offset 0
2013-04-23 17:46:51,351 firehose.py 350 INFO: num_file_sectors 13
2013-04-23 17:46:51,351 firehose.py 351 INFO: start_sector 0
2013-04-23 17:46:51,351 firehose.py 373 DEBUG: NOTE: Trying to read 6656 bytes from
'D:\Dropbox\zenos_paradox\DigestsToSign.bin.mbn'
2013-04-23 17:46:51,351 common.py 1859 DEBUG: SendRawData(6632 bytes)
2013-04-23 17:46:51,351 common.py 628 INFO: (000) (H122) SendRawData(06632 bytes)
2013-04-23 17:46:51,351 common.py 766 DEBUG:
*************************************************************************
2013-04-23 17:46:51,351 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 6632 bytes TO BE SENT CHANNEL
(P0000) (H0122)
2013-04-23 17:46:51,351 common.py 782 DEBUG:

        Truncating 6632 bytes
        1B 00 00 00 03 00 00 00 28 00 00 00 00 00 00 00         ........(.......
        ...
```


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```
        FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF         ................
(sha256 4f4de1b7ea11bae0be22a6629b7bb2cd863d77e7f7e499f7769ca8fcce6c4225)


2013-04-23 17:46:51,351 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX Buffer holds 0 bytes
2013-04-23 17:46:51,351 common.py 1583 DEBUG: FIREHOSE: RX Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 17:46:51,351 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 17:46:51,365 common.py 1343 DEBUG:          <==(channel data) 166 NEW BYTES READ FROM CHANNEL
        Truncating 166 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        3D 22 41 43 4B 22 20 2F 3E 3C 2F 64 61 74 61 3E         ="ACK" /></data>
(sha256 3419fa749218faccf4c2efaecba11a0f776783d7e5cb47884e86e966edd6d36a)


2013-04-23 17:46:51,365 common.py 1621 DEBUG:
==============================================================================
2013-04-23 17:46:51,365 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 90 bytes) -
RX_Buffer still holds 76 bytes:
2013-04-23 17:46:51,365 common.py 1623 DEBUG:
==============================================================================
2013-04-23 17:46:51,365 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Validation is enabled." />
</data>


2013-04-23 17:46:51,365 common.py 1625 DEBUG:
==============================================================================

2013-04-23 17:46:51,365 common.py 1632 INFO: FIREHOSE LOG: Validation is enabled.
2013-04-23 17:46:51,365 common.py 1621 DEBUG:
==============================================================================
2013-04-23 17:46:51,365 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX Buffer still holds 0 bytes:
2013-04-23 17:46:51,365 common.py 1623 DEBUG:
==============================================================================
2013-04-23 17:46:51,365 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 17:46:51,365 common.py 1625 DEBUG:
==============================================================================

2013-04-23 17:46:51,365 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 17:46:51,365 firehose.py 412 INFO:
2013-04-23 17:46:51,365 firehose.py 413 INFO:   /  ___(_)                 | |
2013-04-23 17:46:51,365 firehose.py 414 INFO:   \ `--. _  __ _ _ __   __ _| |_ _   _ _ __ ___
2013-04-23 17:46:51,365 firehose.py 415 INFO:    `--. \ |/ _` | '_ \ / _` | __| | | | '__/ _ \
2013-04-23 17:46:51,365 firehose.py 416 INFO:   /\  / / | ( | | | | | ( | | | | | | | |    /
2013-04-23 17:46:51,365 firehose.py 417 INFO:   \    /| |\  , | | | |\  , |\  |\  , | |  \   |
2013-04-23 17:46:51,365 firehose.py 418 INFO:                 / |
2013-04-23 17:46:51,365 firehose.py 419 INFO:              |___/

2013-04-23 17:46:51,365 firehose.py 420 INFO:   ______                    _
2013-04-23 17:46:51,365 firehose.py 421 INFO:   | ___ \                  | |
2013-04-23 17:46:51,365 firehose.py 422 INFO:   | |_/ /_ _ ___ ___  ___  __| |
2013-04-23 17:46:51,365 firehose.py 423 INFO:   |  __/ _` / __/ __|/ _ \/ _` |
2013-04-23 17:46:51,365 firehose.py 424 INFO:   | | | ( | \   \   \    / ( | |
2013-04-23 17:46:51,365 firehose.py 425 INFO:   \ |  \  , |   /   /\   |\  , |

2013-04-23 17:46:51,365 firehose.py 426 INFO: FIREHOSE: Signed DIGEST sent. This is not counted towards command
sent
2013-04-23 17:46:51,365 firehose.py 427 INFO: FIREHOSE: common.PacketsSent reset to 0
2013-04-23 17:46:51,365 firehose.py 831 INFO:
(000) (H122) FIREHOSE: Sending THIS Configure
2013-04-23 17:46:51,365 common.py 1846 DEBUG: SendString(158 bytes)
2013-04-23 17:46:51,365 common.py 1847 DEBUG:
******************************************************************************

<?xml version="1.0" ?>
<data>
<configure MaxDigestTableSizeInBytes="4096" MemoryName="eMMC" TargetName="8960"
MaxPayloadSizeToTargetInBytes="8192" />
```

QUALCOMM 2013.08.09 at 09:19:14 PDT xingmao.luo-t-l.com 210.83.69.2

```
</data>

2013-04-23 17:46:51,365 common.py 1848 DEBUG:
*****************************************************************************
2013-04-23 17:46:51,365 common.py 628 INFO: (000) (H122) SendString (00158 bytes)  <configure MaxDigestTable
2013-04-23 17:46:51,365 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 17:46:51,365 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 158 bytes TO BE SENT CHANNEL
(P0000) (H0122)
2013-04-23 17:46:51,365 common.py 782 DEBUG:

        Truncating 158 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        31 39 32 22 20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A         192" />.</data>.
(sha256 99eff52921833599360b8c9106569985dec0010fd4e823a99a56a2ba02ea1158)


2013-04-23 17:46:51,381 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 17:46:51,381 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 17:46:51,381 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 17:46:51,398 common.py 1343 DEBUG:           <==(channel data) 396 NEW BYTES READ FROM CHANNEL
        Truncating 396 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        31 42 34 46 34 22 20 2F 3E 3C 2F 64 61 74 61 3E         1B4F4" /></data>
(sha256 92eec013c1fa536a6e4b07b843f37bd3c80f37cd4f74628c359cacbf3e1961ff)


2013-04-23 17:46:51,398 common.py 1621 DEBUG:
=============================================================================
2013-04-23 17:46:51,398 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 297 bytes) -
RX_Buffer still holds 99 bytes:
2013-04-23 17:46:51,398 common.py 1623 DEBUG:
=============================================================================
2013-04-23 17:46:51,398 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" MinVersionSupported="1" MemoryName="eMMC" MaxPayloadSizeFromTargetInBytes="4096"
MaxPayloadSizeToTargetInBytes="8192" MaxPayloadSizeToTargetInBytesSupported="131072" MaxXMLSizeInBytes="4096"
Version="1" TargetName="8974" />
</data>


2013-04-23 17:46:51,398 common.py 1625 DEBUG:
=============================================================================

2013-04-23 17:46:51,398 firehose.py 743 INFO: FIREHOSE: Parsing the CONFIGURE response
2013-04-23 17:46:51,398 common.py 1476 DEBUG: FIREHOSE: GetAttrib("Version")=1
2013-04-23 17:46:51,398 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MinVersionSupported")=1
2013-04-23 17:46:51,398 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxXMLSizeInBytes")=4096
2013-04-23 17:46:51,398 common.py 1476 DEBUG: FIREHOSE:
GetAttrib("MaxPayloadSizeToTargetInBytesSupported")=131072
2013-04-23 17:46:51,398 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxPayloadSizeToTargetInBytes")=8192
2013-04-23 17:46:51,398 common.py 1476 DEBUG: FIREHOSE: GetAttrib("TargetName")=8974
2013-04-23 17:46:51,398 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MemoryName")=eMMC
2013-04-23 17:46:51,398 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxPayloadSizeFromTargetInBytes")=4096
2013-04-23 17:46:51,398 common.py 2059 INFO:

        Looking for 'hello_world.txt'  <--- LOOKING FOR THIS FILE

2013-04-23 17:46:51,398 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\hello_world.txt (13 B) (1 sectors)

2013-04-23 17:46:51,398 firehose.py 1295 INFO: Filename: 'D:\Dropbox\zenos paradox\hello world.txt' (13 B)
2013-04-23 17:46:51,398 firehose.py 1301 INFO:
FIREHOSE: SingleFile()
2013-04-23 17:46:51,398 firehose.py 1302 INFO:
(001) (H123) FIREHOSE: Sending a 'single file' rawprogram.xml for 'D:\Dropbox\zenos paradox\hello world.txt'
2013-04-23 17:46:51,398 common.py 2059 INFO:

        Looking for 'hello_world.txt'  <--- LOOKING FOR THIS FILE

2013-04-23 17:46:51,398 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\hello_world.txt (13 B) (1 sectors)

2013-04-23 17:46:51,398 firehose.py 997 INFO: Filename: 'D:\Dropbox\zenos paradox\hello world.txt' (13 B)
2013-04-23 17:46:51,398 firehose.py 1086 INFO:
FIREHOSE: SendXMLFile(178 bytes)
```


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```
2013-04-23 17:46:51,398 firehose.py 1087 INFO:
(001) (H123) FIREHOSE: SendXMLFile('None')
2013-04-23 17:46:51,398 common.py 1846 DEBUG: SendString(178 bytes)
2013-04-23 17:46:51,398 common.py 1847 DEBUG:
****************************************************************************

<?xml version="1.0" ?>
<data>
  <program SECTOR_SIZE_IN_BYTES="512" filename="hello_world.txt" num_partition_sectors="1"
physical_partition_number="0" start_sector="0"/>
</data>

2013-04-23 17:46:51,413 common.py 1848 DEBUG:
****************************************************************************
2013-04-23 17:46:51,413 common.py 628 INFO: (001) (H123) SendString (00178 bytes)    <program SECTOR_SIZE_IN
2013-04-23 17:46:51,413 common.py 766 DEBUG:
****************************************************************************
2013-04-23 17:46:51,413 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 178 bytes TO BE SENT CHANNEL
(P0001) (H0123)
2013-04-23 17:46:51,413 common.py 782 DEBUG:

        Truncating 178 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        72 3D 22 30 22 2F 3E 0A 3C 2F 64 61 74 61 3E 0A         r="0"/>.</data>.
(sha256 7d1bafe53098cb72b9c94e638020eeb1ad8fe92bcabf4e9a5842ceb1d17ba977)


2013-04-23 17:46:51,413 firehose.py 1266 INFO: FIREHOSE: <data> tag found, ignoring
2013-04-23 17:46:51,413 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 99 bytes
2013-04-23 17:46:51,413 common.py 1621 DEBUG:
============================================================================
2013-04-23 17:46:51,413 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 99 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 17:46:51,413 common.py 1623 DEBUG:
============================================================================
2013-04-23 17:46:51,413 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="logbuf@0xF801E5D0 fh@0xF801B4F4" />
</data>


2013-04-23 17:46:51,413 common.py 1625 DEBUG:
============================================================================

2013-04-23 17:46:51,413 common.py 1632 INFO: FIREHOSE LOG: logbuf@0xF801E5D0 fh@0xF801B4F4
2013-04-23 17:46:51,413 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 17:46:51,413 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 17:46:51,428 common.py 1343 DEBUG:           <==(channel data) 173 NEW BYTES READ FROM CHANNEL
        Truncating 173 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        22 74 72 75 65 22 20 2F 3E 3C 2F 64 61 74 61 3E         "true" /></data>
(sha256 28d02b3f9f3da9966a5c18b87266bd582e674d0f8d6864a42f4edba4783945df)


2013-04-23 17:46:51,428 common.py 1621 DEBUG:
============================================================================
2013-04-23 17:46:51,428 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 82 bytes) -
RX_Buffer still holds 91 bytes:
2013-04-23 17:46:51,428 common.py 1623 DEBUG:
============================================================================
2013-04-23 17:46:51,428 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="start 0, num 1" />
</data>


2013-04-23 17:46:51,428 common.py 1625 DEBUG:
============================================================================

2013-04-23 17:46:51,428 common.py 1632 INFO: FIREHOSE LOG: start 0, num 1
2013-04-23 17:46:51,428 common.py 1621 DEBUG:
============================================================================
2013-04-23 17:46:51,428 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 91 bytes) -
RX_Buffer still holds 0 bytes:
```


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```
2013-04-23 17:46:51,428 common.py 1623 DEBUG:
==============================================================================
2013-04-23 17:46:51,428 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" rawmode="true" />
</data>


2013-04-23 17:46:51,428 common.py 1625 DEBUG:
==============================================================================

2013-04-23 17:46:51,428 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 17:46:51,428 common.py 1476 DEBUG: FIREHOSE: GetAttrib("rawmode")=true
2013-04-23 17:46:51,428 firehose.py 1198 INFO:
FIREHOSE: Target is ready for raw data
2013-04-23 17:46:51,428 common.py 2059 INFO:

        Looking for 'hello_world.txt'  <--- LOOKING FOR THIS FILE

2013-04-23 17:46:51,428 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\hello_world.txt (13 B) (1 sectors)

2013-04-23 17:46:51,428 firehose.py 1329 INFO:
FIREHOSE: SendFileAsRawData('D:\Dropbox\zenos paradox\hello world.txt',NumSectors=1) and
MaxPayloadSizeToTargetInBytes=8192
2013-04-23 17:46:51,428 firehose.py 1364 INFO: TotalStart Time = 1366764411.429000
2013-04-23 17:46:51,428 firehose.py 1392 DEBUG: Just padded 499 zeros before sending
2013-04-23 17:46:51,428 firehose.py 1394 DEBUG:
(002) (H124) FIREHOSE: SendRawData(512 bytes, NumSectors Remaining=1) (on the channel)
2013-04-23 17:46:51,428 common.py 1859 DEBUG: SendRawData(512 bytes)
2013-04-23 17:46:51,428 common.py 628 INFO: (002) (H124) SendRawData(00512 bytes)
2013-04-23 17:46:51,428 common.py 766 DEBUG:
******************************************************************************
2013-04-23 17:46:51,428 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 512 bytes TO BE SENT CHANNEL
(P0002) (H0124)
2013-04-23 17:46:51,428 common.py 782 DEBUG:

        Truncating 512 bytes
        68 65 6C 6C 6F 20 77 6F 72 6C 64 0D 0A 00 00 00         hello world.....
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 6286949049c246ff92b9144abcc0030702f41aa28120c54083de678bb9497167)


2013-04-23 17:46:51,428 firehose.py 1419 DEBUG: Length of str_data is 512
2013-04-23 17:46:51,428 firehose.py 1420 DEBUG: NumSectors is 1
2013-04-23 17:46:51,428 firehose.py 1431 DEBUG: 1 SectorsWritten and 0 NumSectors to go
2013-04-23 17:46:51,428 firehose.py 1450 INFO: COMPLETE: Elapsed Time: 0.00000 (0.0000KBps) [488.2813MBps]

2013-04-23 17:46:51,428 firehose.py 1236 INFO: DONE sending 'D:\Dropbox\zenos paradox\hello world.txt' as RAW
Data,
        looking for ACK to see if it was received correctly!
2013-04-23 17:46:51,428 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 17:46:51,428 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 17:46:51,428 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 17:46:51,444 common.py 1343 DEBUG:           <==(channel data) 178 NEW BYTES READ FROM CHANNEL
        Truncating 178 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        66 61 6C 73 65 22 20 2F 3E 3C 2F 64 61 74 61 3E         false" /></data>
(sha256 30fe553e61aea0bfc6c1ae1bf7090982bfe33a8e00c6f00a6b3a0d88d4217584)


2013-04-23 17:46:51,444 common.py 1621 DEBUG:
==============================================================================
2013-04-23 17:46:51,444 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 86 bytes) -
RX_Buffer still holds 92 bytes:
2013-04-23 17:46:51,444 common.py 1623 DEBUG:
==============================================================================
2013-04-23 17:46:51,444 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Finished address 1" />
</data>
```


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```
2013-04-23 17:46:51,444 common.py 1625 DEBUG:
==============================================================================

2013-04-23 17:46:51,444 common.py 1632 INFO: FIREHOSE LOG: Finished address 1
2013-04-23 17:46:51,444 common.py 1621 DEBUG:
==============================================================================
2013-04-23 17:46:51,444 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 92 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 17:46:51,444 common.py 1623 DEBUG:
==============================================================================
2013-04-23 17:46:51,444 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" rawmode="false" />
</data>


2013-04-23 17:46:51,444 common.py 1625 DEBUG:
==============================================================================

2013-04-23 17:46:51,444 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 17:46:51,444 firehose.py 1260 INFO:
FIREHOSE: Target wrote 'D:\Dropbox\zenos_paradox\hello_world.txt' successfully
2013-04-23 17:46:51,444 firehose.py 703 INFO:
(003) (H125) FIREHOSE: Sending SetBootableStorageDrive
2013-04-23 17:46:51,444 common.py 1846 DEBUG: SendString(76 bytes)
2013-04-23 17:46:51,444 common.py 1847 DEBUG:
******************************************************************************

<?xml version="1.0" ?>
<data>
<setbootablestoragedrive value="0" />
</data>

2013-04-23 17:46:51,444 common.py 1848 DEBUG:
******************************************************************************
2013-04-23 17:46:51,444 common.py 628 INFO: (003) (H125) SendString (00076 bytes)  <setbootablestoragedrive
2013-04-23 17:46:51,444 common.py 766 DEBUG:
******************************************************************************
2013-04-23 17:46:51,444 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 76 bytes TO BE SENT CHANNEL
(P0003) (H0125)
2013-04-23 17:46:51,444 common.py 782 DEBUG:

        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 73         .0" ?>.<data>.<s
        65 74 62 6F 6F 74 61 62 6C 65 73 74 6F 72 61 67         etbootablestorag
        65 64 72 69 76 65 20 76 61 6C 75 65 3D 22 30 22         edrive value="0"
        20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A                      />.</data>.
(sha256 4312df6c048066938cbb38aa69dac897a42e26d6e41adf118a2466e94fc163ae)


2013-04-23 17:46:51,444 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 17:46:51,444 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 17:46:51,444 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 17:46:51,460 common.py 1343 DEBUG:          <==(channel data) 168 NEW BYTES READ FROM CHANNEL
        Truncating 168 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        3D 22 41 43 4B 22 20 2F 3E 3C 2F 64 61 74 61 3E         ="ACK" /></data>
(sha256 92ee940e4e7892b00123b1b03ef8acedc38618020ba84d112dbc66f03c238b1d)


2013-04-23 17:46:51,460 common.py 1621 DEBUG:
==============================================================================
2013-04-23 17:46:51,460 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 92 bytes) -
RX_Buffer still holds 76 bytes:
2013-04-23 17:46:51,460 common.py 1623 DEBUG:
==============================================================================
2013-04-23 17:46:51,460 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Set bootable drive to 0." />
</data>


2013-04-23 17:46:51,460 common.py 1625 DEBUG:
==============================================================================
```


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```
2013-04-23 17:46:51,460 common.py 1632 INFO: FIREHOSE LOG: Set bootable drive to 0.
2013-04-23 17:46:51,460 common.py 1621 DEBUG:
==============================================================================
2013-04-23 17:46:51,460 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX Buffer still holds 0 bytes:
2013-04-23 17:46:51,460 common.py 1623 DEBUG:
==============================================================================
2013-04-23 17:46:51,460 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 17:46:51,460 common.py 1625 DEBUG:
==============================================================================

2013-04-23 17:46:51,460 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 17:46:51,460 firehose.py 723 INFO: Got the ACK, Bootable Storage Drive set successfully
2013-04-23 17:46:51,460 firehose.py 508 INFO:
(004) (H126) FIREHOSE: Sending Reset
2013-04-23 17:46:51,460 common.py 1846 DEBUG: SendString(62 bytes)
2013-04-23 17:46:51,460 common.py 1847 DEBUG:
******************************************************************************

<?xml version="1.0" ?>
<data>
<power value="reset" />
</data>

2013-04-23 17:46:51,460 common.py 1848 DEBUG:
******************************************************************************
2013-04-23 17:46:51,460 common.py 628 INFO: (004) (H126) SendString (00062 bytes)  <power value="reset" /> <
2013-04-23 17:46:51,460 common.py 766 DEBUG:
******************************************************************************
2013-04-23 17:46:51,460 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 62 bytes TO BE SENT CHANNEL
(P0004) (H0126)
2013-04-23 17:46:51,460 common.py 782 DEBUG:

        Showing 62 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 70         .0" ?>.<data>.<p
        6F 77 65 72 20 76 61 6C 75 65 3D 22 72 65 73 65         ower value="rese
        74 22 20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A               t" />.</data>.
(sha256 cfbcefe68ef764dfc1ba5c334389826d5ea757c7571f3af669236b6c5e0ce8c0)


2013-04-23 17:46:51,460 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 17:46:51,460 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 17:46:51,460 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 17:46:51,476 common.py 1343 DEBUG:          <==(channel data) 76 NEW BYTES READ FROM CHANNEL
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54         .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65         F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43         sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                     K" /></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 17:46:51,476 common.py 1621 DEBUG:
==============================================================================
2013-04-23 17:46:51,476 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX Buffer still holds 0 bytes:
2013-04-23 17:46:51,476 common.py 1623 DEBUG:
==============================================================================
2013-04-23 17:46:51,476 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 17:46:51,476 common.py 1625 DEBUG:
==============================================================================

2013-04-23 17:46:51,476 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
```


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```
2013-04-23 17:46:51,476 firehose.py 147 INFO:      _
2013-04-23 17:46:51,476 firehose.py 148 INFO:     | |
2013-04-23 17:46:51,476 firehose.py 149 INFO:   __| | ___   _ __   ___
2013-04-23 17:46:51,476 firehose.py 150 INFO:  / _` |/ _ \| '_ \ / _ \
2013-04-23 17:46:51,476 firehose.py 151 INFO: | ( | | ( ) | | | |    /
2013-04-23 17:46:51,476 firehose.py 152 INFO:  \  , |\   /| | | |\   |
2013-04-23 17:46:51,476 firehose.py 154 INFO: All Finished Successfully
2013-04-23 17:46:51,476 firehose.py 155 INFO: All Finished Successfully
2013-04-23 17:46:51,476 firehose.py 156 INFO: All Finished Successfully
2013-04-23 17:46:51,631 common.py 975 DEBUG: device_close() Port closed successfully
```

QUALCOMM®
2013.08.09 at 00:19:14 PDT
mingmao.luo-tcl.com
210.83.69.2

11.4 Transferring dummy.bin with VIP

```
2013-04-23 18:31:37,607 zeno.py 470 INFO: ParseCommandLineOptions()
2013-04-23 18:31:37,654 zeno.py 683 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 18:31:37,654 zeno.py 684 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 18:31:37,654 zeno.py 685 WARNING:   This program will be setting your BOOTABLE STORAGE DRIVE to PHY
PARTITION 0 (aka USER partition)
2013-04-23 18:31:40,664 common.py 2059 INFO:

        Looking for 'lsusb.py'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:40,664 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\lsusb.py (14.63 KB) (30 sectors)

2013-04-23 18:31:40,773 firehose.py 88 INFO: show_states() See log for '4' Firehose Operations:
2013-04-23 18:31:40,773 firehose.py 90 INFO: 0) <function Configure at 0x022811B0>                      kwargs:
{}
2013-04-23 18:31:40,773 firehose.py 90 INFO: 1) <function SendFile at 0x02281270>                       kwargs:
{'filename': 'dummy.bin'}
2013-04-23 18:31:40,773 firehose.py 90 INFO: 2) <function SetBootableStorageDrive at 0x02281130>        kwargs:
{'SET_BOOTABLE_STORAGE_DRIVE_NUMBER': 0}
2013-04-23 18:31:40,773 firehose.py 90 INFO: 3) <function Reset at 0x02281030>                          kwargs:
{}
2013-04-23 18:31:40,773 firehose.py 116 INFO:
Ensuring file exists before attempting programming
2013-04-23 18:31:40,773 common.py 2059 INFO:

        Looking for 'dummy.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:40,773 common.py 2064 INFO:
        **Found D:\Dropbox\zenos paradox\dummy.bin (2.00 MB) (4096 sectors)

2013-04-23 18:31:40,789 common.py 666 INFO: ser.portstr         \\.\COM4
2013-04-23 18:31:40,789 common.py 667 INFO: ser.parity          N
2013-04-23 18:31:40,789 common.py 668 INFO: ser.baudrate        921600
2013-04-23 18:31:40,789 common.py 669 INFO: ser.bytesize        8
2013-04-23 18:31:40,789 common.py 670 INFO: ser.stopbits        1

2013-04-23 18:31:40,789 common.py 678 INFO: Port \\.\COM4 opened

2013-04-23 18:31:40,789 firehose.py 123 INFO:  _                 _
2013-04-23 18:31:40,789 firehose.py 124 INFO: | |               (_)
2013-04-23 18:31:40,789 firehose.py 125 INFO: | |
2013-04-23 18:31:40,789 firehose.py 126 INFO: | '  \ /   \/  ` | | '  \
2013-04-23 18:31:40,789 firehose.py 127 INFO: | | ) |    / ( | | | | | |
2013-04-23 18:31:40,789 firehose.py 128 INFO: |_.__/ \___|\__, |_|_| |_|
2013-04-23 18:31:40,789 firehose.py 129 INFO:              __/ |
2013-04-23 18:31:40,789 firehose.py 130 INFO:             |___/
2013-04-23 18:31:40,789 firehose.py 329 INFO: FIREHOSE: Sending digitally signed first DIGEST TABLE
2013-04-23 18:31:40,789 firehose.py 337 INFO: start_sector '0'
2013-04-23 18:31:40,789 common.py 2059 INFO:

        Looking for 'DigestsToSign.bin.mbn'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:40,789 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\DigestsToSign.bin.mbn (7.26 KB) (15 sectors)

2013-04-23 18:31:40,789 firehose.py 345 INFO: Filename: 'D:\Dropbox\zenos paradox\DigestsToSign.bin.mbn' (7.26
KB)
2013-04-23 18:31:40,789 firehose.py 353 INFO: FileSizeInSectors 15
2013-04-23 18:31:40,789 firehose.py 354 INFO: file_sector_offset 0
2013-04-23 18:31:40,789 firehose.py 355 INFO: num_file_sectors 15
2013-04-23 18:31:40,789 firehose.py 356 INFO: start_sector 0
2013-04-23 18:31:40,789 firehose.py 378 DEBUG: NOTE: Trying to read 7680 bytes from
'D:\Dropbox\zenos_paradox\DigestsToSign.bin.mbn'
2013-04-23 18:31:40,789 common.py 1859 DEBUG: SendRawData(7432 bytes)
2013-04-23 18:31:40,789 common.py 628 INFO: (000) (H000) SendRawData(07432 bytes)
2013-04-23 18:31:40,789 common.py 766 DEBUG:
**************************************************************************
2013-04-23 18:31:40,789 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 7432 bytes TO BE SENT CHANNEL
(P0000) (H0000)
2013-04-23 18:31:40,789 common.py 782 DEBUG:

        Truncating 7432 bytes
        1B 00 00 00 03 00 00 00 28 00 00 00 00 00 00 00         ........(.......
        ...
```


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```
        FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF         ................
(sha256 a351ba866a1184a0c256c73bf4135991217dee8385b63bf3fc6e983cd30b82bd)


2013-04-23 18:31:40,805 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX Buffer holds 0 bytes
2013-04-23 18:31:40,805 common.py 1583 DEBUG: FIREHOSE: RX Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:40,805 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:40,821 common.py 1343 DEBUG:          <==(channel data) 166 NEW BYTES READ FROM CHANNEL
        Truncating 166 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        3D 22 41 43 4B 22 20 2F 3E 3C 2F 64 61 74 61 3E         ="ACK" /></data>
(sha256 3419fa749218faccf4c2efaecba11a0f776783d7e5cb47884e86e966edd6d36a)


2013-04-23 18:31:40,821 common.py 1621 DEBUG:
==============================================================================
2013-04-23 18:31:40,821 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 90 bytes) -
RX_Buffer still holds 76 bytes:
2013-04-23 18:31:40,821 common.py 1623 DEBUG:
==============================================================================
2013-04-23 18:31:40,821 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Validation is enabled." />
</data>


2013-04-23 18:31:40,821 common.py 1625 DEBUG:
==============================================================================

2013-04-23 18:31:40,821 common.py 1632 INFO: FIREHOSE LOG: Validation is enabled.
2013-04-23 18:31:40,821 common.py 1621 DEBUG:
==============================================================================
2013-04-23 18:31:40,821 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX Buffer still holds 0 bytes:
2013-04-23 18:31:40,821 common.py 1623 DEBUG:
==============================================================================
2013-04-23 18:31:40,821 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 18:31:40,821 common.py 1625 DEBUG:
==============================================================================

2013-04-23 18:31:40,821 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:40,821 firehose.py 423 INFO:
2013-04-23 18:31:40,821 firehose.py 424 INFO:   /  ___(_)                 | |
2013-04-23 18:31:40,821 firehose.py 425 INFO:   \ `--. _  __ _ _ __   __ _| |_ _   _ _ __ ___
2013-04-23 18:31:40,821 firehose.py 426 INFO:    `--. \ |/ _` | '_ \ / _` | __| | | | '__/ _ \
2013-04-23 18:31:40,821 firehose.py 427 INFO:   /\  / / | ( | | | | | ( | | | | | | | |    /
2013-04-23 18:31:40,821 firehose.py 428 INFO:   \    /| |\  , | | | |\  , |\  |\  , | |  \   |
2013-04-23 18:31:40,821 firehose.py 429 INFO:                 / |
2013-04-23 18:31:40,821 firehose.py 430 INFO:              |___/

2013-04-23 18:31:40,821 firehose.py 431 INFO:   ______                      _
2013-04-23 18:31:40,821 firehose.py 432 INFO:   | ___ \                    | |
2013-04-23 18:31:40,821 firehose.py 433 INFO:   | |_/ /_ _ ___ ___  ___  __| |
2013-04-23 18:31:40,821 firehose.py 434 INFO:   |  __/ _` / __/ __|/ _ \/ _` |
2013-04-23 18:31:40,821 firehose.py 435 INFO:   | | | ( | \   \   \    / ( | |
2013-04-23 18:31:40,821 firehose.py 436 INFO:   \ |  \  , |   /   /\   |\  , |

2013-04-23 18:31:40,835 firehose.py 437 INFO: FIREHOSE: Signed DIGEST sent. This is not counted towards command
sent
2013-04-23 18:31:40,835 firehose.py 438 INFO: FIREHOSE: common.PacketsSent reset to 0
2013-04-23 18:31:40,835 firehose.py 842 INFO:
(000) (H000) FIREHOSE: Sending THIS Configure
2013-04-23 18:31:40,835 common.py 1846 DEBUG: SendString(157 bytes)
2013-04-23 18:31:40,835 common.py 1847 DEBUG:
******************************************************************************

<?xml version="1.0" ?>
<data>
<configure MaxDigestTableSizeInBytes="992" MemoryName="eMMC" TargetName="8960"
MaxPayloadSizeToTargetInBytes="8192" />
```


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```
</data>

2013-04-23 18:31:40,835 common.py 1848 DEBUG:
****************************************************************************
2013-04-23 18:31:40,835 common.py 628 INFO: (000) (H000) SendString (00157 bytes)  <configure MaxDigestTable
2013-04-23 18:31:40,835 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:40,835 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 157 bytes TO BE SENT CHANNEL
(P0000) (H0000)
2013-04-23 18:31:40,835 common.py 782 DEBUG:

        Truncating 157 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        31 39 32 22 20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A         192" />.</data>.
(sha256 f97e3788cf8cae8a887c89dd9a8ad2f0c58c13f56366a1900b4e4da3d4dbc268)


2013-04-23 18:31:40,835 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 18:31:40,835 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:40,835 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:40,851 common.py 1343 DEBUG:           <==(channel data) 396 NEW BYTES READ FROM CHANNEL
        Truncating 396 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        31 42 34 46 34 22 20 2F 3E 3C 2F 64 61 74 61 3E         1B4F4" /></data>
(sha256 92eec013c1fa536a6e4b07b843f37bd3c80f37cd4f74628c359cacbf3e1961ff)


2013-04-23 18:31:40,851 common.py 1621 DEBUG:
============================================================================
2013-04-23 18:31:40,851 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 297 bytes) -
RX_Buffer still holds 99 bytes:
2013-04-23 18:31:40,851 common.py 1623 DEBUG:
============================================================================
2013-04-23 18:31:40,851 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" MinVersionSupported="1" MemoryName="eMMC" MaxPayloadSizeFromTargetInBytes="4096"
MaxPayloadSizeToTargetInBytes="8192" MaxPayloadSizeToTargetInBytesSupported="131072" MaxXMLSizeInBytes="4096"
Version="1" TargetName="8974" />
</data>


2013-04-23 18:31:40,851 common.py 1625 DEBUG:
============================================================================

2013-04-23 18:31:40,851 firehose.py 754 INFO: FIREHOSE: Parsing the CONFIGURE response
2013-04-23 18:31:40,851 common.py 1476 DEBUG: FIREHOSE: GetAttrib("Version")=1
2013-04-23 18:31:40,851 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MinVersionSupported")=1
2013-04-23 18:31:40,851 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxXMLSizeInBytes")=4096
2013-04-23 18:31:40,851 common.py 1476 DEBUG: FIREHOSE:
GetAttrib("MaxPayloadSizeToTargetInBytesSupported")=131072
2013-04-23 18:31:40,851 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxPayloadSizeToTargetInBytes")=8192
2013-04-23 18:31:40,851 common.py 1476 DEBUG: FIREHOSE: GetAttrib("TargetName")=8974
2013-04-23 18:31:40,851 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MemoryName")=eMMC
2013-04-23 18:31:40,851 common.py 1476 DEBUG: FIREHOSE: GetAttrib("MaxPayloadSizeFromTargetInBytes")=4096
2013-04-23 18:31:40,851 common.py 2059 INFO:

        Looking for 'dummy.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:40,851 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\dummy.bin (2.00 MB) (4096 sectors)

2013-04-23 18:31:40,851 firehose.py 1306 INFO: Filename: 'D:\Dropbox\zenos paradox\dummy.bin' (2.00 MB)
2013-04-23 18:31:40,851 firehose.py 1312 INFO:
FIREHOSE: SingleFile()
2013-04-23 18:31:40,851 firehose.py 1313 INFO:
(001) (H001) FIREHOSE: Sending a 'single file' rawprogram.xml for 'D:\Dropbox\zenos paradox\dummy.bin'
2013-04-23 18:31:40,851 common.py 2059 INFO:

        Looking for 'dummy.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:40,851 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\dummy.bin (2.00 MB) (4096 sectors)

2013-04-23 18:31:40,851 firehose.py 1008 INFO: Filename: 'D:\Dropbox\zenos paradox\dummy.bin' (2.00 MB)
2013-04-23 18:31:40,851 firehose.py 1097 INFO:
FIREHOSE: SendXMLFile(175 bytes)
```


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```
2013-04-23 18:31:40,851 firehose.py 1098 INFO:
(001) (H001) FIREHOSE: SendXMLFile('None')
2013-04-23 18:31:40,851 common.py 1846 DEBUG: SendString(175 bytes)
2013-04-23 18:31:40,851 common.py 1847 DEBUG:
****************************************************************************

<?xml version="1.0" ?>
<data>
  <program SECTOR_SIZE_IN_BYTES="512" filename="dummy.bin" num_partition_sectors="4096"
physical_partition_number="0" start_sector="0"/>
</data>

2013-04-23 18:31:40,851 common.py 1848 DEBUG:
****************************************************************************
2013-04-23 18:31:40,851 common.py 628 INFO: (001) (H001) SendString (00175 bytes)    <program SECTOR_SIZE_IN
2013-04-23 18:31:40,851 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:40,851 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 175 bytes TO BE SENT CHANNEL
(P0001) (H0001)
2013-04-23 18:31:40,851 common.py 782 DEBUG:

        Truncating 175 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        72 3D 22 30 22 2F 3E 0A 3C 2F 64 61 74 61 3E 0A         r="0"/>.</data>.
(sha256 c0952904564126cf174fc313a386d69e9394221056d8b38359581743b9b0ac5f)


2013-04-23 18:31:40,851 firehose.py 1277 INFO: FIREHOSE: <data> tag found, ignoring
2013-04-23 18:31:40,851 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 99 bytes
2013-04-23 18:31:40,851 common.py 1621 DEBUG:
============================================================================
2013-04-23 18:31:40,851 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 99 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 18:31:40,851 common.py 1623 DEBUG:
============================================================================
2013-04-23 18:31:40,851 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="logbuf@0xF801E5D0 fh@0xF801B4F4" />
</data>


2013-04-23 18:31:40,851 common.py 1625 DEBUG:
============================================================================

2013-04-23 18:31:40,851 common.py 1632 INFO: FIREHOSE LOG: logbuf@0xF801E5D0 fh@0xF801B4F4
2013-04-23 18:31:40,851 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:40,851 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:40,868 common.py 1343 DEBUG:           <==(channel data) 176 NEW BYTES READ FROM CHANNEL
        Truncating 176 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        22 74 72 75 65 22 20 2F 3E 3C 2F 64 61 74 61 3E         "true" /></data>
(sha256 b645b2de4a3e8f775ed872eb9b4ffcc6919d5687055095dc988760d327bfd862)


2013-04-23 18:31:40,868 common.py 1621 DEBUG:
============================================================================
2013-04-23 18:31:40,868 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 85 bytes) -
RX_Buffer still holds 91 bytes:
2013-04-23 18:31:40,868 common.py 1623 DEBUG:
============================================================================
2013-04-23 18:31:40,868 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="start 0, num 4096" />
</data>


2013-04-23 18:31:40,868 common.py 1625 DEBUG:
============================================================================

2013-04-23 18:31:40,868 common.py 1632 INFO: FIREHOSE LOG: start 0, num 4096
2013-04-23 18:31:40,868 common.py 1621 DEBUG:
============================================================================
2013-04-23 18:31:40,868 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 91 bytes) -
RX_Buffer still holds 0 bytes:
```


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```
2013-04-23 18:31:40,868 common.py 1623 DEBUG:
==============================================================================
2013-04-23 18:31:40,868 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" rawmode="true" />
</data>


2013-04-23 18:31:40,868 common.py 1625 DEBUG:
==============================================================================

2013-04-23 18:31:40,868 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:40,868 common.py 1476 DEBUG: FIREHOSE: GetAttrib("rawmode")=true
2013-04-23 18:31:40,868 firehose.py 1209 INFO:
FIREHOSE: Target is ready for raw data
2013-04-23 18:31:40,868 common.py 2059 INFO:

        Looking for 'dummy.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:40,868 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\dummy.bin (2.00 MB) (4096 sectors)

2013-04-23 18:31:40,868 firehose.py 1340 INFO:
FIREHOSE: SendFileAsRawData('D:\Dropbox\zenos paradox\dummy.bin',NumSectors=4096) and
MaxPayloadSizeToTargetInBytes=8192
2013-04-23 18:31:40,868 firehose.py 1375 INFO: TotalStart Time = 1366767100.868000
2013-04-23 18:31:40,868 firehose.py 1405 DEBUG:
(002) (H002) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=4096) (on the channel)
2013-04-23 18:31:40,868 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,868 common.py 628 INFO: (002) (H002) SendRawData(08192 bytes)
2013-04-23 18:31:40,868 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,868 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0002) (H0002)
2013-04-23 18:31:40,868 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,868 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,868 firehose.py 1431 DEBUG: NumSectors is 4096
2013-04-23 18:31:40,868 firehose.py 1442 DEBUG: 16 SectorsWritten and 4080 NumSectors to go
2013-04-23 18:31:40,868 firehose.py 1405 DEBUG:
(003) (H003) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=4080) (on the channel)
2013-04-23 18:31:40,868 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,868 common.py 628 INFO: (003) (H003) SendRawData(08192 bytes)
2013-04-23 18:31:40,868 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,868 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0003) (H0003)
2013-04-23 18:31:40,868 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,868 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,868 firehose.py 1431 DEBUG: NumSectors is 4080
2013-04-23 18:31:40,868 firehose.py 1442 DEBUG: 16 SectorsWritten and 4064 NumSectors to go
2013-04-23 18:31:40,868 firehose.py 1405 DEBUG:
(004) (H004) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=4064) (on the channel)
2013-04-23 18:31:40,868 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,868 common.py 628 INFO: (004) (H004) SendRawData(08192 bytes)
2013-04-23 18:31:40,868 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,868 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0004) (H0004)
2013-04-23 18:31:40,868 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
```


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```
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,868 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:40,868 firehose.py 1431 DEBUG: NumSectors is 4064
2013-04-23 18:31:40,868 firehose.py 1442 DEBUG: 16 SectorsWritten and 4048 NumSectors to go
2013-04-23 18:31:40,868 firehose.py 1405 DEBUG:
(005) (H005) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=4048) (on the channel)
2013-04-23 18:31:40,868 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,868 common.py 628 INFO: (005) (H005) SendRawData(08192 bytes)
2013-04-23 18:31:40,882 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,882 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0005) (H0005)
2013-04-23 18:31:40,882 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,882 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:40,882 firehose.py 1431 DEBUG: NumSectors is 4048
2013-04-23 18:31:40,882 firehose.py 1442 DEBUG: 16 SectorsWritten and 4032 NumSectors to go
2013-04-23 18:31:40,882 firehose.py 1405 DEBUG:
(006) (H006) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=4032) (on the channel)
2013-04-23 18:31:40,882 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,882 common.py 628 INFO: (006) (H006) SendRawData(08192 bytes)
2013-04-23 18:31:40,882 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,882 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0006) (H0006)
2013-04-23 18:31:40,882 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,882 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:40,882 firehose.py 1431 DEBUG: NumSectors is 4032
2013-04-23 18:31:40,882 firehose.py 1442 DEBUG: 16 SectorsWritten and 4016 NumSectors to go
2013-04-23 18:31:40,882 firehose.py 1405 DEBUG:
(007) (H007) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=4016) (on the channel)
2013-04-23 18:31:40,882 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,882 common.py 628 INFO: (007) (H007) SendRawData(08192 bytes)
2013-04-23 18:31:40,882 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,882 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0007) (H0007)
2013-04-23 18:31:40,882 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,882 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,882 firehose.py 1431 DEBUG: NumSectors is 4016
2013-04-23 18:31:40,882 firehose.py 1442 DEBUG: 16 SectorsWritten and 4000 NumSectors to go
2013-04-23 18:31:40,882 firehose.py 1405 DEBUG:
(008) (H008) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=4000) (on the channel)
2013-04-23 18:31:40,882 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,882 common.py 628 INFO: (008) (H008) SendRawData(08192 bytes)
2013-04-23 18:31:40,882 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,882 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0008) (H0008)
2013-04-23 18:31:40,882 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
```


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```
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,882 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,882 firehose.py 1431 DEBUG: NumSectors is 4000
2013-04-23 18:31:40,882 firehose.py 1442 DEBUG: 16 SectorsWritten and 3984 NumSectors to go
2013-04-23 18:31:40,882 firehose.py 1405 DEBUG:
(009) (H009) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3984) (on the channel)
2013-04-23 18:31:40,882 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,882 common.py 628 INFO: (009) (H009) SendRawData(08192 bytes)
2013-04-23 18:31:40,882 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,882 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0009) (H0009)
2013-04-23 18:31:40,882 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,882 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,882 firehose.py 1431 DEBUG: NumSectors is 3984
2013-04-23 18:31:40,882 firehose.py 1442 DEBUG: 16 SectorsWritten and 3968 NumSectors to go
2013-04-23 18:31:40,882 firehose.py 1405 DEBUG:
(010) (H010) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3968) (on the channel)
2013-04-23 18:31:40,882 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,882 common.py 628 INFO: (010) (H010) SendRawData(08192 bytes)
2013-04-23 18:31:40,882 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,882 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0010) (H0010)
2013-04-23 18:31:40,882 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,882 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,882 firehose.py 1431 DEBUG: NumSectors is 3968
2013-04-23 18:31:40,882 firehose.py 1442 DEBUG: 16 SectorsWritten and 3952 NumSectors to go
2013-04-23 18:31:40,882 firehose.py 1405 DEBUG:
(011) (H011) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3952) (on the channel)
2013-04-23 18:31:40,882 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,882 common.py 628 INFO: (011) (H011) SendRawData(08192 bytes)
2013-04-23 18:31:40,882 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,882 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0011) (H0011)
2013-04-23 18:31:40,882 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,882 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,882 firehose.py 1431 DEBUG: NumSectors is 3952
2013-04-23 18:31:40,882 firehose.py 1442 DEBUG: 16 SectorsWritten and 3936 NumSectors to go
2013-04-23 18:31:40,898 firehose.py 1405 DEBUG:
(012) (H012) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3936) (on the channel)
2013-04-23 18:31:40,898 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,898 common.py 628 INFO: (012) (H012) SendRawData(08192 bytes)
2013-04-23 18:31:40,898 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,898 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0012) (H0012)
2013-04-23 18:31:40,898 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)
```


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```
2013-04-23 18:31:40,898 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,898 firehose.py 1431 DEBUG: NumSectors is 3936
2013-04-23 18:31:40,898 firehose.py 1442 DEBUG: 16 SectorsWritten and 3920 NumSectors to go
2013-04-23 18:31:40,898 firehose.py 1405 DEBUG:
(013) (H013) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3920) (on the channel)
2013-04-23 18:31:40,898 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,898 common.py 628 INFO: (013) (H013) SendRawData(08192 bytes)
2013-04-23 18:31:40,898 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,898 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0013) (H0013)
2013-04-23 18:31:40,898 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,898 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,898 firehose.py 1431 DEBUG: NumSectors is 3920
2013-04-23 18:31:40,898 firehose.py 1442 DEBUG: 16 SectorsWritten and 3904 NumSectors to go
2013-04-23 18:31:40,898 firehose.py 1405 DEBUG:
(014) (H014) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3904) (on the channel)
2013-04-23 18:31:40,898 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,898 common.py 628 INFO: (014) (H014) SendRawData(08192 bytes)
2013-04-23 18:31:40,898 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,898 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0014) (H0014)
2013-04-23 18:31:40,898 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,898 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,898 firehose.py 1431 DEBUG: NumSectors is 3904
2013-04-23 18:31:40,898 firehose.py 1442 DEBUG: 16 SectorsWritten and 3888 NumSectors to go
2013-04-23 18:31:40,898 firehose.py 1405 DEBUG:
(015) (H015) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3888) (on the channel)
2013-04-23 18:31:40,898 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,898 common.py 628 INFO: (015) (H015) SendRawData(08192 bytes)
2013-04-23 18:31:40,898 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,898 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0015) (H0015)
2013-04-23 18:31:40,898 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,898 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,898 firehose.py 1431 DEBUG: NumSectors is 3888
2013-04-23 18:31:40,898 firehose.py 1442 DEBUG: 16 SectorsWritten and 3872 NumSectors to go
2013-04-23 18:31:40,898 firehose.py 1405 DEBUG:
(016) (H016) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3872) (on the channel)
2013-04-23 18:31:40,898 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,898 common.py 628 INFO: (016) (H016) SendRawData(08192 bytes)
2013-04-23 18:31:40,898 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,898 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0016) (H0016)
2013-04-23 18:31:40,898 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)
```


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```
2013-04-23 18:31:40,898 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,898 firehose.py 1431 DEBUG: NumSectors is 3872
2013-04-23 18:31:40,898 firehose.py 1442 DEBUG: 16 SectorsWritten and 3856 NumSectors to go
2013-04-23 18:31:40,898 firehose.py 1405 DEBUG:
(017) (H017) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3856) (on the channel)
2013-04-23 18:31:40,898 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,898 common.py 628 INFO: (017) (H017) SendRawData(08192 bytes)
2013-04-23 18:31:40,898 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,898 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0017) (H0017)
2013-04-23 18:31:40,898 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,898 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,898 firehose.py 1431 DEBUG: NumSectors is 3856
2013-04-23 18:31:40,898 firehose.py 1442 DEBUG: 16 SectorsWritten and 3840 NumSectors to go
2013-04-23 18:31:40,898 firehose.py 1405 DEBUG:
(018) (H018) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3840) (on the channel)
2013-04-23 18:31:40,898 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,898 common.py 628 INFO: (018) (H018) SendRawData(08192 bytes)
2013-04-23 18:31:40,898 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,898 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0018) (H0018)
2013-04-23 18:31:40,898 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,914 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,914 firehose.py 1431 DEBUG: NumSectors is 3840
2013-04-23 18:31:40,914 firehose.py 1442 DEBUG: 16 SectorsWritten and 3824 NumSectors to go
2013-04-23 18:31:40,914 firehose.py 1405 DEBUG:
(019) (H019) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3824) (on the channel)
2013-04-23 18:31:40,914 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,914 common.py 628 INFO: (019) (H019) SendRawData(08192 bytes)
2013-04-23 18:31:40,914 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,914 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0019) (H0019)
2013-04-23 18:31:40,914 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,914 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,914 firehose.py 1431 DEBUG: NumSectors is 3824
2013-04-23 18:31:40,914 firehose.py 1442 DEBUG: 16 SectorsWritten and 3808 NumSectors to go
2013-04-23 18:31:40,914 firehose.py 1405 DEBUG:
(020) (H020) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3808) (on the channel)
2013-04-23 18:31:40,914 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,914 common.py 628 INFO: (020) (H020) SendRawData(08192 bytes)
2013-04-23 18:31:40,914 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,914 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0020) (H0020)
2013-04-23 18:31:40,914 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)
```


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```
2013-04-23 18:31:40,914 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,914 firehose.py 1431 DEBUG: NumSectors is 3808
2013-04-23 18:31:40,914 firehose.py 1442 DEBUG: 16 SectorsWritten and 3792 NumSectors to go
2013-04-23 18:31:40,914 firehose.py 1405 DEBUG:
(021) (H021) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3792) (on the channel)
2013-04-23 18:31:40,914 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,914 common.py 628 INFO: (021) (H021) SendRawData(08192 bytes)
2013-04-23 18:31:40,914 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:40,914 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0021) (H0021)
2013-04-23 18:31:40,914 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,914 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,914 firehose.py 1431 DEBUG: NumSectors is 3792
2013-04-23 18:31:40,914 firehose.py 1442 DEBUG: 16 SectorsWritten and 3776 NumSectors to go
2013-04-23 18:31:40,914 firehose.py 1405 DEBUG:
(022) (H022) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3776) (on the channel)
2013-04-23 18:31:40,914 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,914 common.py 628 INFO: (022) (H022) SendRawData(08192 bytes)
2013-04-23 18:31:40,914 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:40,914 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0022) (H0022)
2013-04-23 18:31:40,914 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,914 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,914 firehose.py 1431 DEBUG: NumSectors is 3776
2013-04-23 18:31:40,914 firehose.py 1442 DEBUG: 16 SectorsWritten and 3760 NumSectors to go
2013-04-23 18:31:40,914 firehose.py 1405 DEBUG:
(023) (H023) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3760) (on the channel)
2013-04-23 18:31:40,914 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,914 common.py 628 INFO: (023) (H023) SendRawData(08192 bytes)
2013-04-23 18:31:40,914 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:40,914 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0023) (H0023)
2013-04-23 18:31:40,914 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,914 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,914 firehose.py 1431 DEBUG: NumSectors is 3760
2013-04-23 18:31:40,914 firehose.py 1442 DEBUG: 16 SectorsWritten and 3744 NumSectors to go
2013-04-23 18:31:40,914 firehose.py 1405 DEBUG:
(024) (H024) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3744) (on the channel)
2013-04-23 18:31:40,914 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,914 common.py 628 INFO: (024) (H024) SendRawData(08192 bytes)
2013-04-23 18:31:40,914 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:40,914 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0024) (H0024)
2013-04-23 18:31:40,914 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,914 firehose.py 1430 DEBUG: Length of str_data is 8192
```


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```
2013-04-23 18:31:40,914 firehose.py 1431 DEBUG: NumSectors is 3744
2013-04-23 18:31:40,914 firehose.py 1442 DEBUG: 16 SectorsWritten and 3728 NumSectors to go
2013-04-23 18:31:40,914 firehose.py 1405 DEBUG:
(025) (H025) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3728) (on the channel)
2013-04-23 18:31:40,914 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,914 common.py 628 INFO: (025) (H025) SendRawData(08192 bytes)
2013-04-23 18:31:40,914 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,914 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0025) (H0025)
2013-04-23 18:31:40,914 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,930 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,930 firehose.py 1431 DEBUG: NumSectors is 3728
2013-04-23 18:31:40,930 firehose.py 1442 DEBUG: 16 SectorsWritten and 3712 NumSectors to go
2013-04-23 18:31:40,930 firehose.py 1405 DEBUG:
(026) (H026) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3712) (on the channel)
2013-04-23 18:31:40,930 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,930 common.py 628 INFO: (026) (H026) SendRawData(08192 bytes)
2013-04-23 18:31:40,930 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,930 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0026) (H0026)
2013-04-23 18:31:40,930 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,930 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:40,930 firehose.py 1431 DEBUG: NumSectors is 3712
2013-04-23 18:31:40,930 firehose.py 1442 DEBUG: 16 SectorsWritten and 3696 NumSectors to go
2013-04-23 18:31:40,930 firehose.py 1448 INFO: 09% (elapsed=0.0620)       3.15MBps (WRITE)
2013-04-23 18:31:40,930 firehose.py 1405 DEBUG:
(027) (H027) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3696) (on the channel)
2013-04-23 18:31:40,930 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,930 common.py 628 INFO: (027) (H027) SendRawData(08192 bytes)
2013-04-23 18:31:40,930 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,930 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0027) (H0027)
2013-04-23 18:31:40,930 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,930 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,930 firehose.py 1431 DEBUG: NumSectors is 3696
2013-04-23 18:31:40,930 firehose.py 1442 DEBUG: 16 SectorsWritten and 3680 NumSectors to go
2013-04-23 18:31:40,930 firehose.py 1405 DEBUG:
(028) (H028) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3680) (on the channel)
2013-04-23 18:31:40,930 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,930 common.py 628 INFO: (028) (H028) SendRawData(08192 bytes)
2013-04-23 18:31:40,930 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,930 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0028) (H0028)
2013-04-23 18:31:40,930 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,930 firehose.py 1430 DEBUG: Length of str_data is 8192
```


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```
2013-04-23 18:31:40,930 firehose.py 1431 DEBUG: NumSectors is 3680
2013-04-23 18:31:40,930 firehose.py 1442 DEBUG: 16 SectorsWritten and 3664 NumSectors to go
2013-04-23 18:31:40,930 firehose.py 1405 DEBUG:
(029) (H029) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3664) (on the channel)
2013-04-23 18:31:40,930 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,930 common.py 628 INFO: (029) (H029) SendRawData(08192 bytes)
2013-04-23 18:31:40,930 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,930 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0029) (H0029)
2013-04-23 18:31:40,930 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,930 firehose.py 189 INFO:    _                _       _        _     _
2013-04-23 18:31:40,930 firehose.py 190 INFO:   | |              | |     | |      | |   | |
2013-04-23 18:31:40,930 firehose.py 191 INFO:   | |__   __ _ ___| |__   | |_ __ _| |__ | | ___
2013-04-23 18:31:40,930 firehose.py 192 INFO:   | '_ \ / _` / __| '_ \  | __/ _` | '_ \| |/ _ \
2013-04-23 18:31:40,930 firehose.py 193 INFO:   | | | | (_| \__ \ | | | | || (_| | |_) | |  __/
2013-04-23 18:31:40,930 firehose.py 194 INFO:   | | | |\  , |   / | | |  \  \  , | .  /| |\    |
2013-04-23 18:31:40,930 firehose.py 196 INFO: FIREHOSE: Since common.CurrentDigestLocation=30, Need to send
digest table here digest_file_offset=0
2013-04-23 18:31:40,930 firehose.py 197 INFO: FIREHOSE: Sending DIGEST TABLE 0 (zero based array)
2013-04-23 18:31:40,930 common.py 2059 INFO:

        Looking for 'ChainedTableOfDigests.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:40,930 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin (7.41 KB) (15 sectors)

2013-04-23 18:31:40,946 firehose.py 229 DEBUG: Filename: 'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
(7.41 KB)
2013-04-23 18:31:40,946 firehose.py 241 INFO: FileSizeInSectors 15
2013-04-23 18:31:40,946 firehose.py 242 INFO: digest file offset 0
2013-04-23 18:31:40,946 firehose.py 243 INFO: num file sectors 15
2013-04-23 18:31:40,946 firehose.py 244 INFO: start_sector 0
2013-04-23 18:31:40,946 firehose.py 245 INFO: PayloadSize is 1 sectors (992 bytes)
2013-04-23 18:31:40,946 firehose.py 249 INFO: CHANGED num_file_sectors is 1
2013-04-23 18:31:40,946 firehose.py 262 INFO: DIGEST_TABLE seeking to byte location 0
2013-04-23 18:31:40,946 firehose.py 272 INFO: NOTE: PayloadSize is 992
2013-04-23 18:31:40,946 firehose.py 278 DEBUG: NOTE: Trying to read 992 bytes from
'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
2013-04-23 18:31:40,946 common.py 1859 DEBUG: SendRawData(992 bytes)
2013-04-23 18:31:40,946 common.py 628 INFO: (030) (H030) SendRawData(00992 bytes)
2013-04-23 18:31:40,946 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,946 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 992 bytes TO BE SENT CHANNEL
(P0030) (H0030)
2013-04-23 18:31:40,946 common.py 782 DEBUG:

        Truncating 992 bytes
        9F 1D CB C3 5C 35 0D 60 27 F9 8B E0 F5 C8 B4 3B         ....\5.`'......;
        ...
        63 98 42 EE 96 9F 08 DE 85 E0 4F 39 50 F4 EC 9D         c.B.......O9P...
(sha256 8d963626c6b994da2ac2b6ff65e34e5ab4de0b8cf672459cad91be25b42b78d4)


2013-04-23 18:31:40,946 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 18:31:40,946 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:40,946 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:40,960 common.py 1343 DEBUG:           <==(channel data) 76 NEW BYTES READ FROM CHANNEL
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54         .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65         F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43         sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                     K" />></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 18:31:40,960 common.py 1621 DEBUG:
=============================================================================
2013-04-23 18:31:40,960 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX_Buffer still holds 0 bytes:
```


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```
2013-04-23 18:31:40,960 common.py 1623 DEBUG:
==============================================================================
2013-04-23 18:31:40,960 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 18:31:40,960 common.py 1625 DEBUG:
==============================================================================

2013-04-23 18:31:40,960 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:40,960 firehose.py 305 INFO: DIGEST TABLE ACCEPTED (992 HASHES) - Just RESET
common.CurrentDigestLocation to 0, since now using a new table
2013-04-23 18:31:40,960 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,960 firehose.py 1431 DEBUG: NumSectors is 3664
2013-04-23 18:31:40,960 firehose.py 1442 DEBUG: 16 SectorsWritten and 3648 NumSectors to go
2013-04-23 18:31:40,960 firehose.py 1405 DEBUG:
(031) (H000) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3648) (on the channel)
2013-04-23 18:31:40,960 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,960 common.py 628 INFO: (031) (H000) SendRawData(08192 bytes)
2013-04-23 18:31:40,960 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,960 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0031) (H0000)
2013-04-23 18:31:40,960 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,960 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,960 firehose.py 1431 DEBUG: NumSectors is 3648
2013-04-23 18:31:40,960 firehose.py 1442 DEBUG: 16 SectorsWritten and 3632 NumSectors to go
2013-04-23 18:31:40,960 firehose.py 1405 DEBUG:
(032) (H001) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3632) (on the channel)
2013-04-23 18:31:40,960 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,960 common.py 628 INFO: (032) (H001) SendRawData(08192 bytes)
2013-04-23 18:31:40,960 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,960 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0032) (H0001)
2013-04-23 18:31:40,960 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,960 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,960 firehose.py 1431 DEBUG: NumSectors is 3632
2013-04-23 18:31:40,960 firehose.py 1442 DEBUG: 16 SectorsWritten and 3616 NumSectors to go
2013-04-23 18:31:40,960 firehose.py 1405 DEBUG:
(033) (H002) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3616) (on the channel)
2013-04-23 18:31:40,960 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,960 common.py 628 INFO: (033) (H002) SendRawData(08192 bytes)
2013-04-23 18:31:40,960 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,960 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0033) (H0002)
2013-04-23 18:31:40,960 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,960 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,960 firehose.py 1431 DEBUG: NumSectors is 3616
2013-04-23 18:31:40,960 firehose.py 1442 DEBUG: 16 SectorsWritten and 3600 NumSectors to go
2013-04-23 18:31:40,960 firehose.py 1405 DEBUG:
(034) (H003) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3600) (on the channel)
```


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```
2013-04-23 18:31:40,960 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,960 common.py 628 INFO: (034) (H003) SendRawData(08192 bytes)
2013-04-23 18:31:40,960 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,960 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0034) (H0003)
2013-04-23 18:31:40,960 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,960 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,960 firehose.py 1431 DEBUG: NumSectors is 3600
2013-04-23 18:31:40,960 firehose.py 1442 DEBUG: 16 SectorsWritten and 3584 NumSectors to go
2013-04-23 18:31:40,960 firehose.py 1405 DEBUG:
(035) (H004) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3584) (on the channel)
2013-04-23 18:31:40,960 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,960 common.py 628 INFO: (035) (H004) SendRawData(08192 bytes)
2013-04-23 18:31:40,960 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,960 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0035) (H0004)
2013-04-23 18:31:40,960 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,960 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,960 firehose.py 1431 DEBUG: NumSectors is 3584
2013-04-23 18:31:40,960 firehose.py 1442 DEBUG: 16 SectorsWritten and 3568 NumSectors to go
2013-04-23 18:31:40,960 firehose.py 1405 DEBUG:
(036) (H005) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3568) (on the channel)
2013-04-23 18:31:40,960 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,960 common.py 628 INFO: (036) (H005) SendRawData(08192 bytes)
2013-04-23 18:31:40,960 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,960 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0036) (H0005)
2013-04-23 18:31:40,960 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,960 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,960 firehose.py 1431 DEBUG: NumSectors is 3568
2013-04-23 18:31:40,960 firehose.py 1442 DEBUG: 16 SectorsWritten and 3552 NumSectors to go
2013-04-23 18:31:40,976 firehose.py 1405 DEBUG:
(037) (H006) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3552) (on the channel)
2013-04-23 18:31:40,976 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,976 common.py 628 INFO: (037) (H006) SendRawData(08192 bytes)
2013-04-23 18:31:40,976 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,976 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0037) (H0006)
2013-04-23 18:31:40,976 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,976 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,976 firehose.py 1431 DEBUG: NumSectors is 3552
2013-04-23 18:31:40,976 firehose.py 1442 DEBUG: 16 SectorsWritten and 3536 NumSectors to go
2013-04-23 18:31:40,976 firehose.py 1405 DEBUG:
(038) (H007) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3536) (on the channel)
2013-04-23 18:31:40,976 common.py 1859 DEBUG: SendRawData(8192 bytes)
```


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```
2013-04-23 18:31:40,976 common.py 628 INFO: (038) (H007) SendRawData(08192 bytes)
2013-04-23 18:31:40,976 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,976 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0038) (H0007)
2013-04-23 18:31:40,976 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,976 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,976 firehose.py 1431 DEBUG: NumSectors is 3536
2013-04-23 18:31:40,976 firehose.py 1442 DEBUG: 16 SectorsWritten and 3520 NumSectors to go
2013-04-23 18:31:40,976 firehose.py 1405 DEBUG:
(039) (H008) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3520) (on the channel)
2013-04-23 18:31:40,976 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,976 common.py 628 INFO: (039) (H008) SendRawData(08192 bytes)
2013-04-23 18:31:40,976 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,976 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0039) (H0008)
2013-04-23 18:31:40,976 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,976 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,976 firehose.py 1431 DEBUG: NumSectors is 3520
2013-04-23 18:31:40,976 firehose.py 1442 DEBUG: 16 SectorsWritten and 3504 NumSectors to go
2013-04-23 18:31:40,976 firehose.py 1405 DEBUG:
(040) (H009) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3504) (on the channel)
2013-04-23 18:31:40,976 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,976 common.py 628 INFO: (040) (H009) SendRawData(08192 bytes)
2013-04-23 18:31:40,976 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,976 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0040) (H0009)
2013-04-23 18:31:40,976 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,976 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,976 firehose.py 1431 DEBUG: NumSectors is 3504
2013-04-23 18:31:40,976 firehose.py 1442 DEBUG: 16 SectorsWritten and 3488 NumSectors to go
2013-04-23 18:31:40,976 firehose.py 1405 DEBUG:
(041) (H010) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3488) (on the channel)
2013-04-23 18:31:40,976 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,976 common.py 628 INFO: (041) (H010) SendRawData(08192 bytes)
2013-04-23 18:31:40,976 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,976 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0041) (H0010)
2013-04-23 18:31:40,976 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,976 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,976 firehose.py 1431 DEBUG: NumSectors is 3488
2013-04-23 18:31:40,976 firehose.py 1442 DEBUG: 16 SectorsWritten and 3472 NumSectors to go
2013-04-23 18:31:40,976 firehose.py 1405 DEBUG:
(042) (H011) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3472) (on the channel)
2013-04-23 18:31:40,976 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,976 common.py 628 INFO: (042) (H011) SendRawData(08192 bytes)
```


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```
2013-04-23 18:31:40,976 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,976 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0042) (H0011)
2013-04-23 18:31:40,976 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,976 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,976 firehose.py 1431 DEBUG: NumSectors is 3472
2013-04-23 18:31:40,976 firehose.py 1442 DEBUG: 16 SectorsWritten and 3456 NumSectors to go
2013-04-23 18:31:40,976 firehose.py 1405 DEBUG:
(043) (H012) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3456) (on the channel)
2013-04-23 18:31:40,976 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,976 common.py 628 INFO: (043) (H012) SendRawData(08192 bytes)
2013-04-23 18:31:40,976 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,976 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0043) (H0012)
2013-04-23 18:31:40,976 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,992 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,992 firehose.py 1431 DEBUG: NumSectors is 3456
2013-04-23 18:31:40,992 firehose.py 1442 DEBUG: 16 SectorsWritten and 3440 NumSectors to go
2013-04-23 18:31:40,992 firehose.py 1405 DEBUG:
(044) (H013) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3440) (on the channel)
2013-04-23 18:31:40,992 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,992 common.py 628 INFO: (044) (H013) SendRawData(08192 bytes)
2013-04-23 18:31:40,992 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,992 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0044) (H0013)
2013-04-23 18:31:40,992 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,992 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,992 firehose.py 1431 DEBUG: NumSectors is 3440
2013-04-23 18:31:40,992 firehose.py 1442 DEBUG: 16 SectorsWritten and 3424 NumSectors to go
2013-04-23 18:31:40,992 firehose.py 1405 DEBUG:
(045) (H014) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3424) (on the channel)
2013-04-23 18:31:40,992 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,992 common.py 628 INFO: (045) (H014) SendRawData(08192 bytes)
2013-04-23 18:31:40,992 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:40,992 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0045) (H0014)
2013-04-23 18:31:40,992 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,992 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,992 firehose.py 1431 DEBUG: NumSectors is 3424
2013-04-23 18:31:40,992 firehose.py 1442 DEBUG: 16 SectorsWritten and 3408 NumSectors to go
2013-04-23 18:31:40,992 firehose.py 1405 DEBUG:
(046) (H015) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3408) (on the channel)
2013-04-23 18:31:40,992 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,992 common.py 628 INFO: (046) (H015) SendRawData(08192 bytes)
```


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```
2013-04-23 18:31:40,992 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,992 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0046) (H0015)
2013-04-23 18:31:40,992 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,992 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,992 firehose.py 1431 DEBUG: NumSectors is 3408
2013-04-23 18:31:40,992 firehose.py 1442 DEBUG: 16 SectorsWritten and 3392 NumSectors to go
2013-04-23 18:31:40,992 firehose.py 1405 DEBUG:
(047) (H016) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3392) (on the channel)
2013-04-23 18:31:40,992 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,992 common.py 628 INFO: (047) (H016) SendRawData(08192 bytes)
2013-04-23 18:31:40,992 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,992 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0047) (H0016)
2013-04-23 18:31:40,992 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,992 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,992 firehose.py 1431 DEBUG: NumSectors is 3392
2013-04-23 18:31:40,992 firehose.py 1442 DEBUG: 16 SectorsWritten and 3376 NumSectors to go
2013-04-23 18:31:40,992 firehose.py 1405 DEBUG:
(048) (H017) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3376) (on the channel)
2013-04-23 18:31:40,992 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,992 common.py 628 INFO: (048) (H017) SendRawData(08192 bytes)
2013-04-23 18:31:40,992 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,992 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0048) (H0017)
2013-04-23 18:31:40,992 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,992 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,992 firehose.py 1431 DEBUG: NumSectors is 3376
2013-04-23 18:31:40,992 firehose.py 1442 DEBUG: 16 SectorsWritten and 3360 NumSectors to go
2013-04-23 18:31:40,992 firehose.py 1405 DEBUG:
(049) (H018) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3360) (on the channel)
2013-04-23 18:31:40,992 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,992 common.py 628 INFO: (049) (H018) SendRawData(08192 bytes)
2013-04-23 18:31:40,992 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,992 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0049) (H0018)
2013-04-23 18:31:40,992 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:40,992 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:40,992 firehose.py 1431 DEBUG: NumSectors is 3360
2013-04-23 18:31:40,992 firehose.py 1442 DEBUG: 16 SectorsWritten and 3344 NumSectors to go
2013-04-23 18:31:40,992 firehose.py 1405 DEBUG:
(050) (H019) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3344) (on the channel)
2013-04-23 18:31:40,992 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:40,992 common.py 628 INFO: (050) (H019) SendRawData(08192 bytes)
```


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```
2013-04-23 18:31:40,992 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:40,992 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0050) (H0019)
2013-04-23 18:31:41,007 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,007 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,007 firehose.py 1431 DEBUG: NumSectors is 3344
2013-04-23 18:31:41,007 firehose.py 1442 DEBUG: 16 SectorsWritten and 3328 NumSectors to go
2013-04-23 18:31:41,007 firehose.py 1405 DEBUG:
(051) (H020) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3328) (on the channel)
2013-04-23 18:31:41,007 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,007 common.py 628 INFO: (051) (H020) SendRawData(08192 bytes)
2013-04-23 18:31:41,007 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,007 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0051) (H0020)
2013-04-23 18:31:41,007 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,007 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,007 firehose.py 1431 DEBUG: NumSectors is 3328
2013-04-23 18:31:41,007 firehose.py 1442 DEBUG: 16 SectorsWritten and 3312 NumSectors to go
2013-04-23 18:31:41,007 firehose.py 1405 DEBUG:
(052) (H021) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3312) (on the channel)
2013-04-23 18:31:41,007 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,007 common.py 628 INFO: (052) (H021) SendRawData(08192 bytes)
2013-04-23 18:31:41,007 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,007 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0052) (H0021)
2013-04-23 18:31:41,007 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,007 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,007 firehose.py 1431 DEBUG: NumSectors is 3312
2013-04-23 18:31:41,007 firehose.py 1442 DEBUG: 16 SectorsWritten and 3296 NumSectors to go
2013-04-23 18:31:41,007 firehose.py 1448 INFO: 19% (elapsed=0.0780)       2.50MBps (WRITE)
2013-04-23 18:31:41,007 firehose.py 1405 DEBUG:
(053) (H022) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3296) (on the channel)
2013-04-23 18:31:41,007 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,007 common.py 628 INFO: (053) (H022) SendRawData(08192 bytes)
2013-04-23 18:31:41,007 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,007 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0053) (H0022)
2013-04-23 18:31:41,007 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,007 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,007 firehose.py 1431 DEBUG: NumSectors is 3296
2013-04-23 18:31:41,007 firehose.py 1442 DEBUG: 16 SectorsWritten and 3280 NumSectors to go
2013-04-23 18:31:41,007 firehose.py 1405 DEBUG:
(054) (H023) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3280) (on the channel)
2013-04-23 18:31:41,007 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,007 common.py 628 INFO: (054) (H023) SendRawData(08192 bytes)
```


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```
2013-04-23 18:31:41,007 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,007 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0054) (H0023)
2013-04-23 18:31:41,007 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,007 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,007 firehose.py 1431 DEBUG: NumSectors is 3280
2013-04-23 18:31:41,007 firehose.py 1442 DEBUG: 16 SectorsWritten and 3264 NumSectors to go
2013-04-23 18:31:41,007 firehose.py 1405 DEBUG:
(055) (H024) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3264) (on the channel)
2013-04-23 18:31:41,007 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,007 common.py 628 INFO: (055) (H024) SendRawData(08192 bytes)
2013-04-23 18:31:41,007 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,007 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0055) (H0024)
2013-04-23 18:31:41,007 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,007 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,007 firehose.py 1431 DEBUG: NumSectors is 3264
2013-04-23 18:31:41,007 firehose.py 1442 DEBUG: 16 SectorsWritten and 3248 NumSectors to go
2013-04-23 18:31:41,007 firehose.py 1405 DEBUG:
(056) (H025) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3248) (on the channel)
2013-04-23 18:31:41,007 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,007 common.py 628 INFO: (056) (H025) SendRawData(08192 bytes)
2013-04-23 18:31:41,007 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,007 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0056) (H0025)
2013-04-23 18:31:41,007 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,023 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,023 firehose.py 1431 DEBUG: NumSectors is 3248
2013-04-23 18:31:41,023 firehose.py 1442 DEBUG: 16 SectorsWritten and 3232 NumSectors to go
2013-04-23 18:31:41,023 firehose.py 1405 DEBUG:
(057) (H026) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3232) (on the channel)
2013-04-23 18:31:41,023 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,023 common.py 628 INFO: (057) (H026) SendRawData(08192 bytes)
2013-04-23 18:31:41,023 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,023 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0057) (H0026)
2013-04-23 18:31:41,023 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,023 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,023 firehose.py 1431 DEBUG: NumSectors is 3232
2013-04-23 18:31:41,023 firehose.py 1442 DEBUG: 16 SectorsWritten and 3216 NumSectors to go
2013-04-23 18:31:41,023 firehose.py 1405 DEBUG:
(058) (H027) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3216) (on the channel)
2013-04-23 18:31:41,023 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,023 common.py 628 INFO: (058) (H027) SendRawData(08192 bytes)
```


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```
2013-04-23 18:31:41,023 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,023 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0058) (H0027)
2013-04-23 18:31:41,023 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,023 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,023 firehose.py 1431 DEBUG: NumSectors is 3216
2013-04-23 18:31:41,023 firehose.py 1442 DEBUG: 16 SectorsWritten and 3200 NumSectors to go
2013-04-23 18:31:41,023 firehose.py 1405 DEBUG:
(059) (H028) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3200) (on the channel)
2013-04-23 18:31:41,023 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,023 common.py 628 INFO: (059) (H028) SendRawData(08192 bytes)
2013-04-23 18:31:41,023 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,023 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0059) (H0028)
2013-04-23 18:31:41,023 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,023 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,023 firehose.py 1431 DEBUG: NumSectors is 3200
2013-04-23 18:31:41,023 firehose.py 1442 DEBUG: 16 SectorsWritten and 3184 NumSectors to go
2013-04-23 18:31:41,023 firehose.py 1405 DEBUG:
(060) (H029) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3184) (on the channel)
2013-04-23 18:31:41,023 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,023 common.py 628 INFO: (060) (H029) SendRawData(08192 bytes)
2013-04-23 18:31:41,023 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,023 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0060) (H0029)
2013-04-23 18:31:41,023 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,023 firehose.py 189 INFO:    _                 _       _       _     _
2013-04-23 18:31:41,023 firehose.py 190 INFO:   | |               | |     | |     | |   | |
2013-04-23 18:31:41,023 firehose.py 191 INFO:   | |__   __ _ ___| |__   | |_ __ _| |__ | | ___
2013-04-23 18:31:41,023 firehose.py 192 INFO:   | '  \ /  ` /   | '  \  |   /  ` | '  \| |/   \
2013-04-23 18:31:41,023 firehose.py 193 INFO:   | | | | ( | \   \ | | | | || ( | | | ) | |    /
2013-04-23 18:31:41,023 firehose.py 194 INFO:   | | | |\  , |   / | | |  \  \  , | .  /| |\   |
2013-04-23 18:31:41,023 firehose.py 196 INFO: FIREHOSE: Since common.CurrentDigestLocation=30, Need to send
digest table here digest_file_offset=992
2013-04-23 18:31:41,023 firehose.py 197 INFO: FIREHOSE: Sending DIGEST TABLE 1 (zero based array)
2013-04-23 18:31:41,023 common.py 2059 INFO:

        Looking for 'ChainedTableOfDigests.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:41,023 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin (7.41 KB) (15 sectors)

2013-04-23 18:31:41,023 firehose.py 229 DEBUG: Filename: 'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
(7.41 KB)
2013-04-23 18:31:41,039 firehose.py 241 INFO: FileSizeInSectors 15
2013-04-23 18:31:41,039 firehose.py 242 INFO: digest_file_offset 992
2013-04-23 18:31:41,039 firehose.py 243 INFO: num_file_sectors 14
2013-04-23 18:31:41,039 firehose.py 244 INFO: start_sector 0
2013-04-23 18:31:41,039 firehose.py 245 INFO: PayloadSize is 1 sectors (992 bytes)
2013-04-23 18:31:41,039 firehose.py 249 INFO: CHANGED num_file_sectors is 1
2013-04-23 18:31:41,039 firehose.py 262 INFO: DIGEST_TABLE seeking to byte location 992
2013-04-23 18:31:41,039 firehose.py 272 INFO: NOTE: PayloadSize is 992
2013-04-23 18:31:41,039 firehose.py 278 DEBUG: NOTE: Trying to read 992 bytes from
'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
```


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```
2013-04-23 18:31:41,039 common.py 1859 DEBUG: SendRawData(992 bytes)
2013-04-23 18:31:41,039 common.py 628 INFO: (061) (H030) SendRawData(00992 bytes)
2013-04-23 18:31:41,039 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,039 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 992 bytes TO BE SENT CHANNEL
(P0061) (H0030)
2013-04-23 18:31:41,039 common.py 782 DEBUG:

        Truncating 992 bytes
        9F 1D CB C3 5C 35 0D 60 27 F9 8B E0 F5 C8 B4 3B         ....\5.`'......;
        ...
        1F 7B 14 7E C8 E0 D3 95 44 BE 4B 2C 91 2E C7 11         .{.~....D.K,....
(sha256 9afae5b472989aeff4742393956cd819639842ee969f08de85e04f3950f4ec9d)


2013-04-23 18:31:41,039 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 18:31:41,039 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:41,039 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:41,055 common.py 1343 DEBUG:           <==(channel data) 76 NEW BYTES READ FROM CHANNEL
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54         .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65         F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43         sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                     K" /></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 18:31:41,055 common.py 1621 DEBUG:
=============================================================================
2013-04-23 18:31:41,055 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 18:31:41,055 common.py 1623 DEBUG:
=============================================================================
2013-04-23 18:31:41,055 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 18:31:41,055 common.py 1625 DEBUG:
=============================================================================

2013-04-23 18:31:41,055 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:41,055 firehose.py 305 INFO: DIGEST TABLE ACCEPTED (992 HASHES) - Just RESET
common.CurrentDigestLocation to 0, since now using a new table
2013-04-23 18:31:41,055 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,055 firehose.py 1431 DEBUG: NumSectors is 3184
2013-04-23 18:31:41,055 firehose.py 1442 DEBUG: 16 SectorsWritten and 3168 NumSectors to go
2013-04-23 18:31:41,055 firehose.py 1405 DEBUG:
(062) (H000) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3168) (on the channel)
2013-04-23 18:31:41,055 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,055 common.py 628 INFO: (062) (H000) SendRawData(08192 bytes)
2013-04-23 18:31:41,055 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,055 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0062) (H0000)
2013-04-23 18:31:41,055 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,055 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,055 firehose.py 1431 DEBUG: NumSectors is 3168
2013-04-23 18:31:41,055 firehose.py 1442 DEBUG: 16 SectorsWritten and 3152 NumSectors to go
2013-04-23 18:31:41,055 firehose.py 1405 DEBUG:
(063) (H001) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3152) (on the channel)
2013-04-23 18:31:41,055 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,055 common.py 628 INFO: (063) (H001) SendRawData(08192 bytes)
2013-04-23 18:31:41,055 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,055 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0063) (H0001)
2013-04-23 18:31:41,055 common.py 782 DEBUG:
```


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```
        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,055 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,055 firehose.py 1431 DEBUG: NumSectors is 3152
2013-04-23 18:31:41,055 firehose.py 1442 DEBUG: 16 SectorsWritten and 3136 NumSectors to go
2013-04-23 18:31:41,055 firehose.py 1405 DEBUG:
(064) (H002) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3136) (on the channel)
2013-04-23 18:31:41,055 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,055 common.py 628 INFO: (064) (H002) SendRawData(08192 bytes)
2013-04-23 18:31:41,055 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,055 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0064) (H0002)
2013-04-23 18:31:41,055 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,055 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,055 firehose.py 1431 DEBUG: NumSectors is 3136
2013-04-23 18:31:41,055 firehose.py 1442 DEBUG: 16 SectorsWritten and 3120 NumSectors to go
2013-04-23 18:31:41,055 firehose.py 1405 DEBUG:
(065) (H003) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3120) (on the channel)
2013-04-23 18:31:41,055 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,055 common.py 628 INFO: (065) (H003) SendRawData(08192 bytes)
2013-04-23 18:31:41,055 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,055 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0065) (H0003)
2013-04-23 18:31:41,055 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,055 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,055 firehose.py 1431 DEBUG: NumSectors is 3120
2013-04-23 18:31:41,055 firehose.py 1442 DEBUG: 16 SectorsWritten and 3104 NumSectors to go
2013-04-23 18:31:41,055 firehose.py 1405 DEBUG:
(066) (H004) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3104) (on the channel)
2013-04-23 18:31:41,055 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,055 common.py 628 INFO: (066) (H004) SendRawData(08192 bytes)
2013-04-23 18:31:41,055 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,055 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0066) (H0004)
2013-04-23 18:31:41,055 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,055 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,055 firehose.py 1431 DEBUG: NumSectors is 3104
2013-04-23 18:31:41,055 firehose.py 1442 DEBUG: 16 SectorsWritten and 3088 NumSectors to go
2013-04-23 18:31:41,055 firehose.py 1405 DEBUG:
(067) (H005) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3088) (on the channel)
2013-04-23 18:31:41,055 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,055 common.py 628 INFO: (067) (H005) SendRawData(08192 bytes)
2013-04-23 18:31:41,055 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,055 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0067) (H0005)
2013-04-23 18:31:41,055 common.py 782 DEBUG:
```


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```
        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,055 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,055 firehose.py 1431 DEBUG: NumSectors is 3088
2013-04-23 18:31:41,055 firehose.py 1442 DEBUG: 16 SectorsWritten and 3072 NumSectors to go
2013-04-23 18:31:41,055 firehose.py 1405 DEBUG:
(068) (H006) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3072) (on the channel)
2013-04-23 18:31:41,055 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,055 common.py 628 INFO: (068) (H006) SendRawData(08192 bytes)
2013-04-23 18:31:41,055 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,055 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0068) (H0006)
2013-04-23 18:31:41,071 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,071 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,071 firehose.py 1431 DEBUG: NumSectors is 3072
2013-04-23 18:31:41,071 firehose.py 1442 DEBUG: 16 SectorsWritten and 3056 NumSectors to go
2013-04-23 18:31:41,071 firehose.py 1405 DEBUG:
(069) (H007) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3056) (on the channel)
2013-04-23 18:31:41,071 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,071 common.py 628 INFO: (069) (H007) SendRawData(08192 bytes)
2013-04-23 18:31:41,071 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,071 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0069) (H0007)
2013-04-23 18:31:41,071 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,071 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,071 firehose.py 1431 DEBUG: NumSectors is 3056
2013-04-23 18:31:41,071 firehose.py 1442 DEBUG: 16 SectorsWritten and 3040 NumSectors to go
2013-04-23 18:31:41,071 firehose.py 1405 DEBUG:
(070) (H008) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3040) (on the channel)
2013-04-23 18:31:41,071 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,071 common.py 628 INFO: (070) (H008) SendRawData(08192 bytes)
2013-04-23 18:31:41,071 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,071 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0070) (H0008)
2013-04-23 18:31:41,071 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,071 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,071 firehose.py 1431 DEBUG: NumSectors is 3040
2013-04-23 18:31:41,071 firehose.py 1442 DEBUG: 16 SectorsWritten and 3024 NumSectors to go
2013-04-23 18:31:41,071 firehose.py 1405 DEBUG:
(071) (H009) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3024) (on the channel)
2013-04-23 18:31:41,071 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,071 common.py 628 INFO: (071) (H009) SendRawData(08192 bytes)
2013-04-23 18:31:41,071 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,071 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0071) (H0009)
2013-04-23 18:31:41,071 common.py 782 DEBUG:

        Truncating 8192 bytes
```


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```
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,071 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,071 firehose.py 1431 DEBUG: NumSectors is 3024
2013-04-23 18:31:41,071 firehose.py 1442 DEBUG: 16 SectorsWritten and 3008 NumSectors to go
2013-04-23 18:31:41,071 firehose.py 1405 DEBUG:
(072) (H010) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=3008) (on the channel)
2013-04-23 18:31:41,071 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,071 common.py 628 INFO: (072) (H010) SendRawData(08192 bytes)
2013-04-23 18:31:41,071 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,071 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0072) (H0010)
2013-04-23 18:31:41,071 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,071 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,071 firehose.py 1431 DEBUG: NumSectors is 3008
2013-04-23 18:31:41,071 firehose.py 1442 DEBUG: 16 SectorsWritten and 2992 NumSectors to go
2013-04-23 18:31:41,071 firehose.py 1405 DEBUG:
(073) (H011) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2992) (on the channel)
2013-04-23 18:31:41,071 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,071 common.py 628 INFO: (073) (H011) SendRawData(08192 bytes)
2013-04-23 18:31:41,071 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,071 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0073) (H0011)
2013-04-23 18:31:41,071 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,071 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,071 firehose.py 1431 DEBUG: NumSectors is 2992
2013-04-23 18:31:41,071 firehose.py 1442 DEBUG: 16 SectorsWritten and 2976 NumSectors to go
2013-04-23 18:31:41,071 firehose.py 1405 DEBUG:
(074) (H012) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2976) (on the channel)
2013-04-23 18:31:41,071 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,071 common.py 628 INFO: (074) (H012) SendRawData(08192 bytes)
2013-04-23 18:31:41,071 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,071 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0074) (H0012)
2013-04-23 18:31:41,071 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,071 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,071 firehose.py 1431 DEBUG: NumSectors is 2976
2013-04-23 18:31:41,071 firehose.py 1442 DEBUG: 16 SectorsWritten and 2960 NumSectors to go
2013-04-23 18:31:41,071 firehose.py 1405 DEBUG:
(075) (H013) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2960) (on the channel)
2013-04-23 18:31:41,071 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,071 common.py 628 INFO: (075) (H013) SendRawData(08192 bytes)
2013-04-23 18:31:41,085 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,085 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0075) (H0013)
2013-04-23 18:31:41,085 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
```


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```
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,085 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,085 firehose.py 1431 DEBUG: NumSectors is 2960
2013-04-23 18:31:41,085 firehose.py 1442 DEBUG: 16 SectorsWritten and 2944 NumSectors to go
2013-04-23 18:31:41,085 firehose.py 1405 DEBUG:
(076) (H014) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2944) (on the channel)
2013-04-23 18:31:41,085 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,085 common.py 628 INFO: (076) (H014) SendRawData(08192 bytes)
2013-04-23 18:31:41,085 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,085 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0076) (H0014)
2013-04-23 18:31:41,085 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,085 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,085 firehose.py 1431 DEBUG: NumSectors is 2944
2013-04-23 18:31:41,085 firehose.py 1442 DEBUG: 16 SectorsWritten and 2928 NumSectors to go
2013-04-23 18:31:41,085 firehose.py 1405 DEBUG:
(077) (H015) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2928) (on the channel)
2013-04-23 18:31:41,085 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,085 common.py 628 INFO: (077) (H015) SendRawData(08192 bytes)
2013-04-23 18:31:41,085 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,085 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0077) (H0015)
2013-04-23 18:31:41,085 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,085 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,085 firehose.py 1431 DEBUG: NumSectors is 2928
2013-04-23 18:31:41,085 firehose.py 1442 DEBUG: 16 SectorsWritten and 2912 NumSectors to go
2013-04-23 18:31:41,085 firehose.py 1405 DEBUG:
(078) (H016) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2912) (on the channel)
2013-04-23 18:31:41,085 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,085 common.py 628 INFO: (078) (H016) SendRawData(08192 bytes)
2013-04-23 18:31:41,085 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,085 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0078) (H0016)
2013-04-23 18:31:41,085 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,085 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,085 firehose.py 1431 DEBUG: NumSectors is 2912
2013-04-23 18:31:41,085 firehose.py 1442 DEBUG: 16 SectorsWritten and 2896 NumSectors to go
2013-04-23 18:31:41,085 firehose.py 1448 INFO: 29% (elapsed=0.0780)       2.50MBps (WRITE)
2013-04-23 18:31:41,085 firehose.py 1405 DEBUG:
(079) (H017) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2896) (on the channel)
2013-04-23 18:31:41,085 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,085 common.py 628 INFO: (079) (H017) SendRawData(08192 bytes)
2013-04-23 18:31:41,085 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,085 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0079) (H0017)
2013-04-23 18:31:41,085 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
```


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```
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,085 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,085 firehose.py 1431 DEBUG: NumSectors is 2896
2013-04-23 18:31:41,085 firehose.py 1442 DEBUG: 16 SectorsWritten and 2880 NumSectors to go
2013-04-23 18:31:41,085 firehose.py 1405 DEBUG:
(080) (H018) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2880) (on the channel)
2013-04-23 18:31:41,085 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,085 common.py 628 INFO: (080) (H018) SendRawData(08192 bytes)
2013-04-23 18:31:41,085 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,085 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0080) (H0018)
2013-04-23 18:31:41,085 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,085 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,085 firehose.py 1431 DEBUG: NumSectors is 2880
2013-04-23 18:31:41,085 firehose.py 1442 DEBUG: 16 SectorsWritten and 2864 NumSectors to go
2013-04-23 18:31:41,085 firehose.py 1405 DEBUG:
(081) (H019) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2864) (on the channel)
2013-04-23 18:31:41,085 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,085 common.py 628 INFO: (081) (H019) SendRawData(08192 bytes)
2013-04-23 18:31:41,085 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,085 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0081) (H0019)
2013-04-23 18:31:41,085 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,101 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,101 firehose.py 1431 DEBUG: NumSectors is 2864
2013-04-23 18:31:41,101 firehose.py 1442 DEBUG: 16 SectorsWritten and 2848 NumSectors to go
2013-04-23 18:31:41,101 firehose.py 1405 DEBUG:
(082) (H020) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2848) (on the channel)
2013-04-23 18:31:41,101 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,101 common.py 628 INFO: (082) (H020) SendRawData(08192 bytes)
2013-04-23 18:31:41,101 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,101 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0082) (H0020)
2013-04-23 18:31:41,101 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,101 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,101 firehose.py 1431 DEBUG: NumSectors is 2848
2013-04-23 18:31:41,101 firehose.py 1442 DEBUG: 16 SectorsWritten and 2832 NumSectors to go
2013-04-23 18:31:41,101 firehose.py 1405 DEBUG:
(083) (H021) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2832) (on the channel)
2013-04-23 18:31:41,101 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,101 common.py 628 INFO: (083) (H021) SendRawData(08192 bytes)
2013-04-23 18:31:41,101 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,101 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0083) (H0021)
2013-04-23 18:31:41,101 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
```


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```
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,101 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,101 firehose.py 1431 DEBUG: NumSectors is 2832
2013-04-23 18:31:41,101 firehose.py 1442 DEBUG: 16 SectorsWritten and 2816 NumSectors to go
2013-04-23 18:31:41,101 firehose.py 1405 DEBUG:
(084) (H022) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2816) (on the channel)
2013-04-23 18:31:41,101 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,101 common.py 628 INFO: (084) (H022) SendRawData(08192 bytes)
2013-04-23 18:31:41,101 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,101 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0084) (H0022)
2013-04-23 18:31:41,101 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,101 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,101 firehose.py 1431 DEBUG: NumSectors is 2816
2013-04-23 18:31:41,101 firehose.py 1442 DEBUG: 16 SectorsWritten and 2800 NumSectors to go
2013-04-23 18:31:41,101 firehose.py 1405 DEBUG:
(085) (H023) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2800) (on the channel)
2013-04-23 18:31:41,101 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,101 common.py 628 INFO: (085) (H023) SendRawData(08192 bytes)
2013-04-23 18:31:41,101 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,101 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0085) (H0023)
2013-04-23 18:31:41,101 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,101 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,101 firehose.py 1431 DEBUG: NumSectors is 2800
2013-04-23 18:31:41,101 firehose.py 1442 DEBUG: 16 SectorsWritten and 2784 NumSectors to go
2013-04-23 18:31:41,101 firehose.py 1405 DEBUG:
(086) (H024) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2784) (on the channel)
2013-04-23 18:31:41,101 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,101 common.py 628 INFO: (086) (H024) SendRawData(08192 bytes)
2013-04-23 18:31:41,101 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,101 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0086) (H0024)
2013-04-23 18:31:41,101 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,101 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,101 firehose.py 1431 DEBUG: NumSectors is 2784
2013-04-23 18:31:41,101 firehose.py 1442 DEBUG: 16 SectorsWritten and 2768 NumSectors to go
2013-04-23 18:31:41,101 firehose.py 1405 DEBUG:
(087) (H025) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2768) (on the channel)
2013-04-23 18:31:41,101 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,101 common.py 628 INFO: (087) (H025) SendRawData(08192 bytes)
2013-04-23 18:31:41,101 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,101 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0087) (H0025)
2013-04-23 18:31:41,101 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
```


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```
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,101 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,101 firehose.py 1431 DEBUG: NumSectors is 2768
2013-04-23 18:31:41,101 firehose.py 1442 DEBUG: 16 SectorsWritten and 2752 NumSectors to go
2013-04-23 18:31:41,101 firehose.py 1405 DEBUG:
(088) (H026) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2752) (on the channel)
2013-04-23 18:31:41,101 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,101 common.py 628 INFO: (088) (H026) SendRawData(08192 bytes)
2013-04-23 18:31:41,101 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,101 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0088) (H0026)
2013-04-23 18:31:41,101 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,117 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,117 firehose.py 1431 DEBUG: NumSectors is 2752
2013-04-23 18:31:41,117 firehose.py 1442 DEBUG: 16 SectorsWritten and 2736 NumSectors to go
2013-04-23 18:31:41,117 firehose.py 1405 DEBUG:
(089) (H027) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2736) (on the channel)
2013-04-23 18:31:41,117 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,117 common.py 628 INFO: (089) (H027) SendRawData(08192 bytes)
2013-04-23 18:31:41,117 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,117 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0089) (H0027)
2013-04-23 18:31:41,117 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,117 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,117 firehose.py 1431 DEBUG: NumSectors is 2736
2013-04-23 18:31:41,117 firehose.py 1442 DEBUG: 16 SectorsWritten and 2720 NumSectors to go
2013-04-23 18:31:41,117 firehose.py 1405 DEBUG:
(090) (H028) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2720) (on the channel)
2013-04-23 18:31:41,117 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,117 common.py 628 INFO: (090) (H028) SendRawData(08192 bytes)
2013-04-23 18:31:41,117 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,117 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0090) (H0028)
2013-04-23 18:31:41,117 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,117 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,117 firehose.py 1431 DEBUG: NumSectors is 2720
2013-04-23 18:31:41,117 firehose.py 1442 DEBUG: 16 SectorsWritten and 2704 NumSectors to go
2013-04-23 18:31:41,117 firehose.py 1405 DEBUG:
(091) (H029) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2704) (on the channel)
2013-04-23 18:31:41,117 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,117 common.py 628 INFO: (091) (H029) SendRawData(08192 bytes)
2013-04-23 18:31:41,117 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,117 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0091) (H0029)
2013-04-23 18:31:41,117 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)
```


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```
2013-04-23 18:31:41,117 firehose.py 189 INFO:     _                 _       _        _     _
2013-04-23 18:31:41,117 firehose.py 190 INFO:   | |             | |     | |      | |   | |
2013-04-23 18:31:41,117 firehose.py 191 INFO:   | |             | |     | |      | |   | |
2013-04-23 18:31:41,117 firehose.py 192 INFO:   | '  \ /  ` /   | '  \  |   /  ` | '  \| |/   \
2013-04-23 18:31:41,117 firehose.py 193 INFO:   | | | | (_| \__ \ | | | | || (_| | |_) | |  __/
2013-04-23 18:31:41,117 firehose.py 194 INFO:   |_| |_|\__,_|___/_| |_|  \__\__,_|_|_.__/|_|\___|
2013-04-23 18:31:41,117 firehose.py 196 INFO: FIREHOSE: Since common.CurrentDigestLocation=30, Need to send
digest table here digest_file_offset=1984
2013-04-23 18:31:41,117 firehose.py 197 INFO: FIREHOSE: Sending DIGEST TABLE 2 (zero based array)
2013-04-23 18:31:41,117 common.py 2059 INFO:

        Looking for 'ChainedTableOfDigests.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:41,117 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin (7.41 KB) (15 sectors)

2013-04-23 18:31:41,117 firehose.py 229 DEBUG: Filename: 'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
(7.41 KB)
2013-04-23 18:31:41,117 firehose.py 241 INFO: FileSizeInSectors 15
2013-04-23 18:31:41,117 firehose.py 242 INFO: digest_file_offset 1984
2013-04-23 18:31:41,117 firehose.py 243 INFO: num_file_sectors 12
2013-04-23 18:31:41,117 firehose.py 244 INFO: start_sector 0
2013-04-23 18:31:41,132 firehose.py 245 INFO: PayloadSize is 1 sectors (992 bytes)
2013-04-23 18:31:41,132 firehose.py 249 INFO: CHANGED num file sectors is 1
2013-04-23 18:31:41,132 firehose.py 262 INFO: DIGEST_TABLE seeking to byte location 1984
2013-04-23 18:31:41,132 firehose.py 272 INFO: NOTE: PayloadSize is 992
2013-04-23 18:31:41,132 firehose.py 278 DEBUG: NOTE: Trying to read 992 bytes from
'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
2013-04-23 18:31:41,132 common.py 1859 DEBUG: SendRawData(992 bytes)
2013-04-23 18:31:41,132 common.py 628 INFO: (092) (H030) SendRawData(00992 bytes)
2013-04-23 18:31:41,132 common.py 766 DEBUG:
***********************************************************************
2013-04-23 18:31:41,132 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 992 bytes TO BE SENT CHANNEL
(P0092) (H0030)
2013-04-23 18:31:41,132 common.py 782 DEBUG:

        Truncating 992 bytes
        9F 1D CB C3 5C 35 0D 60 27 F9 8B E0 F5 C8 B4 3B          ....\5.`'......;
        ...
        8A 42 7D 4D 4D F4 1A 23 68 14 B8 2B 6E 2E 90 0E          .B}MM..#h..+n...
(sha256 2fe1ecfbad0a9aac278ed641f481ff8d1f7b147ec8e0d39544be4b2c912ec711)


2013-04-23 18:31:41,132 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 18:31:41,132 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:41,132 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:41,148 common.py 1343 DEBUG:           <==(channel data) 76 NEW BYTES READ FROM CHANNEL
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54         .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65         F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43         sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                     K" /></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 18:31:41,148 common.py 1621 DEBUG:
===========================================================================
2013-04-23 18:31:41,148 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 18:31:41,148 common.py 1623 DEBUG:
===========================================================================
2013-04-23 18:31:41,148 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 18:31:41,148 common.py 1625 DEBUG:
===========================================================================

2013-04-23 18:31:41,148 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:41,148 firehose.py 305 INFO: DIGEST TABLE ACCEPTED (992 HASHES) - Just RESET
common.CurrentDigestLocation to 0, since now using a new table
2013-04-23 18:31:41,148 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,148 firehose.py 1431 DEBUG: NumSectors is 2704
```


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```
2013-04-23 18:31:41,148 firehose.py 1442 DEBUG: 16 SectorsWritten and 2688 NumSectors to go
2013-04-23 18:31:41,148 firehose.py 1405 DEBUG:
(093) (H000) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2688) (on the channel)
2013-04-23 18:31:41,148 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,148 common.py 628 INFO: (093) (H000) SendRawData(08192 bytes)
2013-04-23 18:31:41,148 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,148 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0093) (H0000)
2013-04-23 18:31:41,148 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,148 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,148 firehose.py 1431 DEBUG: NumSectors is 2688
2013-04-23 18:31:41,148 firehose.py 1442 DEBUG: 16 SectorsWritten and 2672 NumSectors to go
2013-04-23 18:31:41,148 firehose.py 1405 DEBUG:
(094) (H001) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2672) (on the channel)
2013-04-23 18:31:41,148 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,148 common.py 628 INFO: (094) (H001) SendRawData(08192 bytes)
2013-04-23 18:31:41,148 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,148 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0094) (H0001)
2013-04-23 18:31:41,148 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,148 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,148 firehose.py 1431 DEBUG: NumSectors is 2672
2013-04-23 18:31:41,148 firehose.py 1442 DEBUG: 16 SectorsWritten and 2656 NumSectors to go
2013-04-23 18:31:41,148 firehose.py 1405 DEBUG:
(095) (H002) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2656) (on the channel)
2013-04-23 18:31:41,148 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,148 common.py 628 INFO: (095) (H002) SendRawData(08192 bytes)
2013-04-23 18:31:41,148 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,148 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0095) (H0002)
2013-04-23 18:31:41,148 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,148 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,148 firehose.py 1431 DEBUG: NumSectors is 2656
2013-04-23 18:31:41,148 firehose.py 1442 DEBUG: 16 SectorsWritten and 2640 NumSectors to go
2013-04-23 18:31:41,148 firehose.py 1405 DEBUG:
(096) (H003) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2640) (on the channel)
2013-04-23 18:31:41,148 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,148 common.py 628 INFO: (096) (H003) SendRawData(08192 bytes)
2013-04-23 18:31:41,148 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,148 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0096) (H0003)
2013-04-23 18:31:41,148 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,148 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,148 firehose.py 1431 DEBUG: NumSectors is 2640
2013-04-23 18:31:41,148 firehose.py 1442 DEBUG: 16 SectorsWritten and 2624 NumSectors to go
```


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```
2013-04-23 18:31:41,148 firehose.py 1405 DEBUG:
(097) (H004) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2624) (on the channel)
2013-04-23 18:31:41,148 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,148 common.py 628 INFO: (097) (H004) SendRawData(08192 bytes)
2013-04-23 18:31:41,148 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,148 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0097) (H0004)
2013-04-23 18:31:41,148 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,148 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,148 firehose.py 1431 DEBUG: NumSectors is 2624
2013-04-23 18:31:41,148 firehose.py 1442 DEBUG: 16 SectorsWritten and 2608 NumSectors to go
2013-04-23 18:31:41,148 firehose.py 1405 DEBUG:
(098) (H005) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2608) (on the channel)
2013-04-23 18:31:41,148 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,148 common.py 628 INFO: (098) (H005) SendRawData(08192 bytes)
2013-04-23 18:31:41,148 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,148 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0098) (H0005)
2013-04-23 18:31:41,148 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,148 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,148 firehose.py 1431 DEBUG: NumSectors is 2608
2013-04-23 18:31:41,148 firehose.py 1442 DEBUG: 16 SectorsWritten and 2592 NumSectors to go
2013-04-23 18:31:41,148 firehose.py 1405 DEBUG:
(099) (H006) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2592) (on the channel)
2013-04-23 18:31:41,148 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,148 common.py 628 INFO: (099) (H006) SendRawData(08192 bytes)
2013-04-23 18:31:41,148 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,148 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0099) (H0006)
2013-04-23 18:31:41,164 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,164 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,164 firehose.py 1431 DEBUG: NumSectors is 2592
2013-04-23 18:31:41,164 firehose.py 1442 DEBUG: 16 SectorsWritten and 2576 NumSectors to go
2013-04-23 18:31:41,164 firehose.py 1405 DEBUG:
(100) (H007) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2576) (on the channel)
2013-04-23 18:31:41,164 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,164 common.py 628 INFO: (100) (H007) SendRawData(08192 bytes)
2013-04-23 18:31:41,164 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,164 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0100) (H0007)
2013-04-23 18:31:41,164 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,164 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,164 firehose.py 1431 DEBUG: NumSectors is 2576
2013-04-23 18:31:41,164 firehose.py 1442 DEBUG: 16 SectorsWritten and 2560 NumSectors to go
2013-04-23 18:31:41,164 firehose.py 1405 DEBUG:
```


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```
(101) (H008) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2560) (on the channel)
2013-04-23 18:31:41,164 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,164 common.py 628 INFO: (101) (H008) SendRawData(08192 bytes)
2013-04-23 18:31:41,164 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,164 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0101) (H0008)
2013-04-23 18:31:41,164 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,164 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,164 firehose.py 1431 DEBUG: NumSectors is 2560
2013-04-23 18:31:41,164 firehose.py 1442 DEBUG: 16 SectorsWritten and 2544 NumSectors to go
2013-04-23 18:31:41,164 firehose.py 1405 DEBUG:
(102) (H009) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2544) (on the channel)
2013-04-23 18:31:41,164 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,164 common.py 628 INFO: (102) (H009) SendRawData(08192 bytes)
2013-04-23 18:31:41,164 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,164 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0102) (H0009)
2013-04-23 18:31:41,164 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,164 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,164 firehose.py 1431 DEBUG: NumSectors is 2544
2013-04-23 18:31:41,164 firehose.py 1442 DEBUG: 16 SectorsWritten and 2528 NumSectors to go
2013-04-23 18:31:41,164 firehose.py 1405 DEBUG:
(103) (H010) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2528) (on the channel)
2013-04-23 18:31:41,164 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,164 common.py 628 INFO: (103) (H010) SendRawData(08192 bytes)
2013-04-23 18:31:41,164 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,164 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0103) (H0010)
2013-04-23 18:31:41,164 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,164 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,164 firehose.py 1431 DEBUG: NumSectors is 2528
2013-04-23 18:31:41,164 firehose.py 1442 DEBUG: 16 SectorsWritten and 2512 NumSectors to go
2013-04-23 18:31:41,164 firehose.py 1405 DEBUG:
(104) (H011) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2512) (on the channel)
2013-04-23 18:31:41,164 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,164 common.py 628 INFO: (104) (H011) SendRawData(08192 bytes)
2013-04-23 18:31:41,164 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,164 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0104) (H0011)
2013-04-23 18:31:41,164 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,164 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,164 firehose.py 1431 DEBUG: NumSectors is 2512
2013-04-23 18:31:41,164 firehose.py 1442 DEBUG: 16 SectorsWritten and 2496 NumSectors to go
2013-04-23 18:31:41,164 firehose.py 1448 INFO: 39% (elapsed=0.0780)       2.50MBps (WRITE)
2013-04-23 18:31:41,164 firehose.py 1405 DEBUG:
```


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```
(105) (H012) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2496) (on the channel)
2013-04-23 18:31:41,164 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,164 common.py 628 INFO: (105) (H012) SendRawData(08192 bytes)
2013-04-23 18:31:41,164 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,164 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0105) (H0012)
2013-04-23 18:31:41,164 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,180 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,180 firehose.py 1431 DEBUG: NumSectors is 2496
2013-04-23 18:31:41,180 firehose.py 1442 DEBUG: 16 SectorsWritten and 2480 NumSectors to go
2013-04-23 18:31:41,180 firehose.py 1405 DEBUG:
(106) (H013) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2480) (on the channel)
2013-04-23 18:31:41,180 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,180 common.py 628 INFO: (106) (H013) SendRawData(08192 bytes)
2013-04-23 18:31:41,180 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,180 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0106) (H0013)
2013-04-23 18:31:41,180 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,180 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,180 firehose.py 1431 DEBUG: NumSectors is 2480
2013-04-23 18:31:41,180 firehose.py 1442 DEBUG: 16 SectorsWritten and 2464 NumSectors to go
2013-04-23 18:31:41,180 firehose.py 1405 DEBUG:
(107) (H014) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2464) (on the channel)
2013-04-23 18:31:41,180 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,180 common.py 628 INFO: (107) (H014) SendRawData(08192 bytes)
2013-04-23 18:31:41,180 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,180 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0107) (H0014)
2013-04-23 18:31:41,180 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,180 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,180 firehose.py 1431 DEBUG: NumSectors is 2464
2013-04-23 18:31:41,180 firehose.py 1442 DEBUG: 16 SectorsWritten and 2448 NumSectors to go
2013-04-23 18:31:41,180 firehose.py 1405 DEBUG:
(108) (H015) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2448) (on the channel)
2013-04-23 18:31:41,180 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,180 common.py 628 INFO: (108) (H015) SendRawData(08192 bytes)
2013-04-23 18:31:41,180 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,180 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0108) (H0015)
2013-04-23 18:31:41,180 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,180 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,180 firehose.py 1431 DEBUG: NumSectors is 2448
2013-04-23 18:31:41,180 firehose.py 1442 DEBUG: 16 SectorsWritten and 2432 NumSectors to go
2013-04-23 18:31:41,180 firehose.py 1405 DEBUG:
(109) (H016) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2432) (on the channel)
```


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```
2013-04-23 18:31:41,180 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,180 common.py 628 INFO: (109) (H016) SendRawData(08192 bytes)
2013-04-23 18:31:41,180 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,180 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0109) (H0016)
2013-04-23 18:31:41,180 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,180 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,180 firehose.py 1431 DEBUG: NumSectors is 2432
2013-04-23 18:31:41,180 firehose.py 1442 DEBUG: 16 SectorsWritten and 2416 NumSectors to go
2013-04-23 18:31:41,180 firehose.py 1405 DEBUG:
(110) (H017) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2416) (on the channel)
2013-04-23 18:31:41,180 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,180 common.py 628 INFO: (110) (H017) SendRawData(08192 bytes)
2013-04-23 18:31:41,180 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,180 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0110) (H0017)
2013-04-23 18:31:41,180 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,180 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,180 firehose.py 1431 DEBUG: NumSectors is 2416
2013-04-23 18:31:41,180 firehose.py 1442 DEBUG: 16 SectorsWritten and 2400 NumSectors to go
2013-04-23 18:31:41,180 firehose.py 1405 DEBUG:
(111) (H018) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2400) (on the channel)
2013-04-23 18:31:41,180 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,180 common.py 628 INFO: (111) (H018) SendRawData(08192 bytes)
2013-04-23 18:31:41,180 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,180 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0111) (H0018)
2013-04-23 18:31:41,180 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,180 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,180 firehose.py 1431 DEBUG: NumSectors is 2400
2013-04-23 18:31:41,180 firehose.py 1442 DEBUG: 16 SectorsWritten and 2384 NumSectors to go
2013-04-23 18:31:41,180 firehose.py 1405 DEBUG:
(112) (H019) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2384) (on the channel)
2013-04-23 18:31:41,180 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,180 common.py 628 INFO: (112) (H019) SendRawData(08192 bytes)
2013-04-23 18:31:41,180 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,180 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0112) (H0019)
2013-04-23 18:31:41,180 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,194 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,194 firehose.py 1431 DEBUG: NumSectors is 2384
2013-04-23 18:31:41,194 firehose.py 1442 DEBUG: 16 SectorsWritten and 2368 NumSectors to go
2013-04-23 18:31:41,194 firehose.py 1405 DEBUG:
(113) (H020) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2368) (on the channel)
2013-04-23 18:31:41,194 common.py 1859 DEBUG: SendRawData(8192 bytes)
```


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```
2013-04-23 18:31:41,194 common.py 628 INFO: (113) (H020) SendRawData(08192 bytes)
2013-04-23 18:31:41,194 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,194 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0113) (H0020)
2013-04-23 18:31:41,194 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,194 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,194 firehose.py 1431 DEBUG: NumSectors is 2368
2013-04-23 18:31:41,194 firehose.py 1442 DEBUG: 16 SectorsWritten and 2352 NumSectors to go
2013-04-23 18:31:41,194 firehose.py 1405 DEBUG:
(114) (H021) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2352) (on the channel)
2013-04-23 18:31:41,194 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,194 common.py 628 INFO: (114) (H021) SendRawData(08192 bytes)
2013-04-23 18:31:41,194 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,194 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0114) (H0021)
2013-04-23 18:31:41,194 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,194 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,194 firehose.py 1431 DEBUG: NumSectors is 2352
2013-04-23 18:31:41,194 firehose.py 1442 DEBUG: 16 SectorsWritten and 2336 NumSectors to go
2013-04-23 18:31:41,194 firehose.py 1405 DEBUG:
(115) (H022) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2336) (on the channel)
2013-04-23 18:31:41,194 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,194 common.py 628 INFO: (115) (H022) SendRawData(08192 bytes)
2013-04-23 18:31:41,194 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,194 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0115) (H0022)
2013-04-23 18:31:41,194 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,194 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,194 firehose.py 1431 DEBUG: NumSectors is 2336
2013-04-23 18:31:41,194 firehose.py 1442 DEBUG: 16 SectorsWritten and 2320 NumSectors to go
2013-04-23 18:31:41,194 firehose.py 1405 DEBUG:
(116) (H023) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2320) (on the channel)
2013-04-23 18:31:41,194 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,194 common.py 628 INFO: (116) (H023) SendRawData(08192 bytes)
2013-04-23 18:31:41,194 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,194 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0116) (H0023)
2013-04-23 18:31:41,194 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,194 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,194 firehose.py 1431 DEBUG: NumSectors is 2320
2013-04-23 18:31:41,194 firehose.py 1442 DEBUG: 16 SectorsWritten and 2304 NumSectors to go
2013-04-23 18:31:41,194 firehose.py 1405 DEBUG:
(117) (H024) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2304) (on the channel)
2013-04-23 18:31:41,194 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,194 common.py 628 INFO: (117) (H024) SendRawData(08192 bytes)
```


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```
2013-04-23 18:31:41,194 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,194 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0117) (H0024)
2013-04-23 18:31:41,194 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,194 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,194 firehose.py 1431 DEBUG: NumSectors is 2304
2013-04-23 18:31:41,194 firehose.py 1442 DEBUG: 16 SectorsWritten and 2288 NumSectors to go
2013-04-23 18:31:41,194 firehose.py 1405 DEBUG:
(118) (H025) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2288) (on the channel)
2013-04-23 18:31:41,194 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,194 common.py 628 INFO: (118) (H025) SendRawData(08192 bytes)
2013-04-23 18:31:41,194 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,194 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0118) (H0025)
2013-04-23 18:31:41,194 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,194 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,194 firehose.py 1431 DEBUG: NumSectors is 2288
2013-04-23 18:31:41,194 firehose.py 1442 DEBUG: 16 SectorsWritten and 2272 NumSectors to go
2013-04-23 18:31:41,194 firehose.py 1405 DEBUG:
(119) (H026) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2272) (on the channel)
2013-04-23 18:31:41,194 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,194 common.py 628 INFO: (119) (H026) SendRawData(08192 bytes)
2013-04-23 18:31:41,194 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,194 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0119) (H0026)
2013-04-23 18:31:41,210 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,210 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,210 firehose.py 1431 DEBUG: NumSectors is 2272
2013-04-23 18:31:41,210 firehose.py 1442 DEBUG: 16 SectorsWritten and 2256 NumSectors to go
2013-04-23 18:31:41,210 firehose.py 1405 DEBUG:
(120) (H027) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2256) (on the channel)
2013-04-23 18:31:41,210 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,210 common.py 628 INFO: (120) (H027) SendRawData(08192 bytes)
2013-04-23 18:31:41,210 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,210 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0120) (H0027)
2013-04-23 18:31:41,210 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,210 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,210 firehose.py 1431 DEBUG: NumSectors is 2256
2013-04-23 18:31:41,210 firehose.py 1442 DEBUG: 16 SectorsWritten and 2240 NumSectors to go
2013-04-23 18:31:41,210 firehose.py 1405 DEBUG:
(121) (H028) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2240) (on the channel)
2013-04-23 18:31:41,210 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,210 common.py 628 INFO: (121) (H028) SendRawData(08192 bytes)
```


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```
2013-04-23 18:31:41,210 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,210 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0121) (H0028)
2013-04-23 18:31:41,210 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,210 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,210 firehose.py 1431 DEBUG: NumSectors is 2240
2013-04-23 18:31:41,210 firehose.py 1442 DEBUG: 16 SectorsWritten and 2224 NumSectors to go
2013-04-23 18:31:41,210 firehose.py 1405 DEBUG:
(122) (H029) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2224) (on the channel)
2013-04-23 18:31:41,210 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,210 common.py 628 INFO: (122) (H029) SendRawData(08192 bytes)
2013-04-23 18:31:41,210 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,210 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0122) (H0029)
2013-04-23 18:31:41,210 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,210 firehose.py 189 INFO:    _                 _         _        _     _
2013-04-23 18:31:41,210 firehose.py 190 INFO:   | |               | |       | |      | |   | |
2013-04-23 18:31:41,210 firehose.py 191 INFO:   | |__   __ _ ___| |__     | |_ __ _| |__ | | ___
2013-04-23 18:31:41,210 firehose.py 192 INFO:   | '_ \ / _` / __| '_ \    | __/ _` | '_ \| |/ _ \
2013-04-23 18:31:41,210 firehose.py 193 INFO:   | | | | ( | \   \ | | | | || ( | | | ) | |    /
2013-04-23 18:31:41,210 firehose.py 194 INFO:   | | | |\  , |   / | | |  \  \  , | .  /| |\   |
2013-04-23 18:31:41,210 firehose.py 196 INFO: FIREHOSE: Since common.CurrentDigestLocation=30, Need to send
digest table here digest_file_offset=2976
2013-04-23 18:31:41,210 firehose.py 197 INFO: FIREHOSE: Sending DIGEST TABLE 3 (zero based array)
2013-04-23 18:31:41,210 common.py 2059 INFO:

        Looking for 'ChainedTableOfDigests.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:41,210 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin (7.41 KB) (15 sectors)

2013-04-23 18:31:41,210 firehose.py 229 DEBUG: Filename: 'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
(7.41 KB)
2013-04-23 18:31:41,210 firehose.py 241 INFO: FileSizeInSectors 15
2013-04-23 18:31:41,210 firehose.py 242 INFO: digest file offset 2976
2013-04-23 18:31:41,210 firehose.py 243 INFO: num_file_sectors 10
2013-04-23 18:31:41,226 firehose.py 244 INFO: start_sector 0
2013-04-23 18:31:41,226 firehose.py 245 INFO: PayloadSize is 1 sectors (992 bytes)
2013-04-23 18:31:41,226 firehose.py 249 INFO: CHANGED num file sectors is 1
2013-04-23 18:31:41,226 firehose.py 262 INFO: DIGEST TABLE seeking to byte location 2976
2013-04-23 18:31:41,226 firehose.py 272 INFO: NOTE: PayloadSize is 992
2013-04-23 18:31:41,226 firehose.py 278 DEBUG: NOTE: Trying to read 992 bytes from
'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
2013-04-23 18:31:41,226 common.py 1859 DEBUG: SendRawData(992 bytes)
2013-04-23 18:31:41,226 common.py 628 INFO: (123) (H030) SendRawData(00992 bytes)
2013-04-23 18:31:41,226 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,226 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 992 bytes TO BE SENT CHANNEL
(P0123) (H0030)
2013-04-23 18:31:41,226 common.py 782 DEBUG:

        Truncating 992 bytes
        9F 1D CB C3 5C 35 0D 60 27 F9 8B E0 F5 C8 B4 3B         ....\5.`'......;
        ...
        B7 71 51 92 70 23 BA 6E 86 F9 EE DD E4 9F F0 9C         .qQ.p#.n........
(sha256 4a26631d7e4bcceebe909df26d890a2a8a427d4d4df41a236814b82b6e2e900e)


2013-04-23 18:31:41,226 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 18:31:41,226 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:41,226 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:41,242 common.py 1343 DEBUG:           <==(channel data) 76 NEW BYTES READ FROM CHANNEL
```


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```
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54         .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65         F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43         sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                     K" /></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 18:31:41,242 common.py 1621 DEBUG:
==============================================================================
2013-04-23 18:31:41,242 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX Buffer still holds 0 bytes:
2013-04-23 18:31:41,242 common.py 1623 DEBUG:
==============================================================================
2013-04-23 18:31:41,242 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 18:31:41,242 common.py 1625 DEBUG:
==============================================================================

2013-04-23 18:31:41,242 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:41,242 firehose.py 305 INFO: DIGEST TABLE ACCEPTED (992 HASHES) - Just RESET
common.CurrentDigestLocation to 0, since now using a new table
2013-04-23 18:31:41,242 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,242 firehose.py 1431 DEBUG: NumSectors is 2224
2013-04-23 18:31:41,242 firehose.py 1442 DEBUG: 16 SectorsWritten and 2208 NumSectors to go
2013-04-23 18:31:41,242 firehose.py 1405 DEBUG:
(124) (H000) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2208) (on the channel)
2013-04-23 18:31:41,242 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,242 common.py 628 INFO: (124) (H000) SendRawData(08192 bytes)
2013-04-23 18:31:41,242 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,242 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0124) (H0000)
2013-04-23 18:31:41,242 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,242 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,242 firehose.py 1431 DEBUG: NumSectors is 2208
2013-04-23 18:31:41,242 firehose.py 1442 DEBUG: 16 SectorsWritten and 2192 NumSectors to go
2013-04-23 18:31:41,242 firehose.py 1405 DEBUG:
(125) (H001) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2192) (on the channel)
2013-04-23 18:31:41,242 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,242 common.py 628 INFO: (125) (H001) SendRawData(08192 bytes)
2013-04-23 18:31:41,242 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,242 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0125) (H0001)
2013-04-23 18:31:41,242 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,242 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,242 firehose.py 1431 DEBUG: NumSectors is 2192
2013-04-23 18:31:41,242 firehose.py 1442 DEBUG: 16 SectorsWritten and 2176 NumSectors to go
2013-04-23 18:31:41,242 firehose.py 1405 DEBUG:
(126) (H002) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2176) (on the channel)
2013-04-23 18:31:41,242 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,242 common.py 628 INFO: (126) (H002) SendRawData(08192 bytes)
2013-04-23 18:31:41,242 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,242 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0126) (H0002)
2013-04-23 18:31:41,242 common.py 782 DEBUG:
```


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```
        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,242 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,242 firehose.py 1431 DEBUG: NumSectors is 2176
2013-04-23 18:31:41,242 firehose.py 1442 DEBUG: 16 SectorsWritten and 2160 NumSectors to go
2013-04-23 18:31:41,242 firehose.py 1405 DEBUG:
(127) (H003) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2160) (on the channel)
2013-04-23 18:31:41,242 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,242 common.py 628 INFO: (127) (H003) SendRawData(08192 bytes)
2013-04-23 18:31:41,242 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,242 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0127) (H0003)
2013-04-23 18:31:41,242 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,242 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,242 firehose.py 1431 DEBUG: NumSectors is 2160
2013-04-23 18:31:41,242 firehose.py 1442 DEBUG: 16 SectorsWritten and 2144 NumSectors to go
2013-04-23 18:31:41,242 firehose.py 1405 DEBUG:
(128) (H004) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2144) (on the channel)
2013-04-23 18:31:41,242 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,242 common.py 628 INFO: (128) (H004) SendRawData(08192 bytes)
2013-04-23 18:31:41,242 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,242 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0128) (H0004)
2013-04-23 18:31:41,242 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,242 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,242 firehose.py 1431 DEBUG: NumSectors is 2144
2013-04-23 18:31:41,242 firehose.py 1442 DEBUG: 16 SectorsWritten and 2128 NumSectors to go
2013-04-23 18:31:41,242 firehose.py 1405 DEBUG:
(129) (H005) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2128) (on the channel)
2013-04-23 18:31:41,242 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,242 common.py 628 INFO: (129) (H005) SendRawData(08192 bytes)
2013-04-23 18:31:41,242 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,242 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0129) (H0005)
2013-04-23 18:31:41,242 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,242 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,242 firehose.py 1431 DEBUG: NumSectors is 2128
2013-04-23 18:31:41,242 firehose.py 1442 DEBUG: 16 SectorsWritten and 2112 NumSectors to go
2013-04-23 18:31:41,242 firehose.py 1405 DEBUG:
(130) (H006) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2112) (on the channel)
2013-04-23 18:31:41,242 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,242 common.py 628 INFO: (130) (H006) SendRawData(08192 bytes)
2013-04-23 18:31:41,242 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,242 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0130) (H0006)
2013-04-23 18:31:41,257 common.py 782 DEBUG:
```


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```
        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,257 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,257 firehose.py 1431 DEBUG: NumSectors is 2112
2013-04-23 18:31:41,257 firehose.py 1442 DEBUG: 16 SectorsWritten and 2096 NumSectors to go
2013-04-23 18:31:41,257 firehose.py 1448 INFO: 48% (elapsed=0.0940)       2.08MBps (WRITE)
2013-04-23 18:31:41,257 firehose.py 1405 DEBUG:
(131) (H007) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2096) (on the channel)
2013-04-23 18:31:41,257 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,257 common.py 628 INFO: (131) (H007) SendRawData(08192 bytes)
2013-04-23 18:31:41,257 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,257 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0131) (H0007)
2013-04-23 18:31:41,257 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,257 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,257 firehose.py 1431 DEBUG: NumSectors is 2096
2013-04-23 18:31:41,257 firehose.py 1442 DEBUG: 16 SectorsWritten and 2080 NumSectors to go
2013-04-23 18:31:41,257 firehose.py 1405 DEBUG:
(132) (H008) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2080) (on the channel)
2013-04-23 18:31:41,257 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,257 common.py 628 INFO: (132) (H008) SendRawData(08192 bytes)
2013-04-23 18:31:41,257 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,257 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0132) (H0008)
2013-04-23 18:31:41,257 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,257 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,257 firehose.py 1431 DEBUG: NumSectors is 2080
2013-04-23 18:31:41,257 firehose.py 1442 DEBUG: 16 SectorsWritten and 2064 NumSectors to go
2013-04-23 18:31:41,257 firehose.py 1405 DEBUG:
(133) (H009) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2064) (on the channel)
2013-04-23 18:31:41,257 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,257 common.py 628 INFO: (133) (H009) SendRawData(08192 bytes)
2013-04-23 18:31:41,257 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,257 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0133) (H0009)
2013-04-23 18:31:41,257 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,257 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,257 firehose.py 1431 DEBUG: NumSectors is 2064
2013-04-23 18:31:41,257 firehose.py 1442 DEBUG: 16 SectorsWritten and 2048 NumSectors to go
2013-04-23 18:31:41,257 firehose.py 1405 DEBUG:
(134) (H010) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2048) (on the channel)
2013-04-23 18:31:41,257 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,257 common.py 628 INFO: (134) (H010) SendRawData(08192 bytes)
2013-04-23 18:31:41,257 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,257 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0134) (H0010)
2013-04-23 18:31:41,257 common.py 782 DEBUG:
```


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```
        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,257 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,257 firehose.py 1431 DEBUG: NumSectors is 2048
2013-04-23 18:31:41,257 firehose.py 1442 DEBUG: 16 SectorsWritten and 2032 NumSectors to go
2013-04-23 18:31:41,257 firehose.py 1405 DEBUG:
(135) (H011) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2032) (on the channel)
2013-04-23 18:31:41,257 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,257 common.py 628 INFO: (135) (H011) SendRawData(08192 bytes)
2013-04-23 18:31:41,257 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,257 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0135) (H0011)
2013-04-23 18:31:41,257 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,257 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,257 firehose.py 1431 DEBUG: NumSectors is 2032
2013-04-23 18:31:41,257 firehose.py 1442 DEBUG: 16 SectorsWritten and 2016 NumSectors to go
2013-04-23 18:31:41,257 firehose.py 1405 DEBUG:
(136) (H012) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2016) (on the channel)
2013-04-23 18:31:41,257 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,257 common.py 628 INFO: (136) (H012) SendRawData(08192 bytes)
2013-04-23 18:31:41,257 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,257 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0136) (H0012)
2013-04-23 18:31:41,257 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,257 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,273 firehose.py 1431 DEBUG: NumSectors is 2016
2013-04-23 18:31:41,273 firehose.py 1442 DEBUG: 16 SectorsWritten and 2000 NumSectors to go
2013-04-23 18:31:41,273 firehose.py 1405 DEBUG:
(137) (H013) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=2000) (on the channel)
2013-04-23 18:31:41,273 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,273 common.py 628 INFO: (137) (H013) SendRawData(08192 bytes)
2013-04-23 18:31:41,273 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,273 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0137) (H0013)
2013-04-23 18:31:41,273 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,273 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,273 firehose.py 1431 DEBUG: NumSectors is 2000
2013-04-23 18:31:41,273 firehose.py 1442 DEBUG: 16 SectorsWritten and 1984 NumSectors to go
2013-04-23 18:31:41,273 firehose.py 1405 DEBUG:
(138) (H014) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1984) (on the channel)
2013-04-23 18:31:41,273 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,273 common.py 628 INFO: (138) (H014) SendRawData(08192 bytes)
2013-04-23 18:31:41,273 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,273 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0138) (H0014)
2013-04-23 18:31:41,273 common.py 782 DEBUG:

        Truncating 8192 bytes
```


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```
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,273 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,273 firehose.py 1431 DEBUG: NumSectors is 1984
2013-04-23 18:31:41,273 firehose.py 1442 DEBUG: 16 SectorsWritten and 1968 NumSectors to go
2013-04-23 18:31:41,273 firehose.py 1405 DEBUG:
(139) (H015) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1968) (on the channel)
2013-04-23 18:31:41,273 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,273 common.py 628 INFO: (139) (H015) SendRawData(08192 bytes)
2013-04-23 18:31:41,273 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,273 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0139) (H0015)
2013-04-23 18:31:41,273 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,273 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,273 firehose.py 1431 DEBUG: NumSectors is 1968
2013-04-23 18:31:41,273 firehose.py 1442 DEBUG: 16 SectorsWritten and 1952 NumSectors to go
2013-04-23 18:31:41,273 firehose.py 1405 DEBUG:
(140) (H016) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1952) (on the channel)
2013-04-23 18:31:41,273 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,273 common.py 628 INFO: (140) (H016) SendRawData(08192 bytes)
2013-04-23 18:31:41,273 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,273 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0140) (H0016)
2013-04-23 18:31:41,273 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,273 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,273 firehose.py 1431 DEBUG: NumSectors is 1952
2013-04-23 18:31:41,273 firehose.py 1442 DEBUG: 16 SectorsWritten and 1936 NumSectors to go
2013-04-23 18:31:41,273 firehose.py 1405 DEBUG:
(141) (H017) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1936) (on the channel)
2013-04-23 18:31:41,273 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,273 common.py 628 INFO: (141) (H017) SendRawData(08192 bytes)
2013-04-23 18:31:41,273 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,273 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0141) (H0017)
2013-04-23 18:31:41,273 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,273 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,273 firehose.py 1431 DEBUG: NumSectors is 1936
2013-04-23 18:31:41,273 firehose.py 1442 DEBUG: 16 SectorsWritten and 1920 NumSectors to go
2013-04-23 18:31:41,273 firehose.py 1405 DEBUG:
(142) (H018) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1920) (on the channel)
2013-04-23 18:31:41,273 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,273 common.py 628 INFO: (142) (H018) SendRawData(08192 bytes)
2013-04-23 18:31:41,273 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,273 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0142) (H0018)
2013-04-23 18:31:41,273 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
```


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```
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,273 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,273 firehose.py 1431 DEBUG: NumSectors is 1920
2013-04-23 18:31:41,273 firehose.py 1442 DEBUG: 16 SectorsWritten and 1904 NumSectors to go
2013-04-23 18:31:41,273 firehose.py 1405 DEBUG:
(143) (H019) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1904) (on the channel)
2013-04-23 18:31:41,273 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,273 common.py 628 INFO: (143) (H019) SendRawData(08192 bytes)
2013-04-23 18:31:41,273 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,273 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0143) (H0019)
2013-04-23 18:31:41,273 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,289 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,289 firehose.py 1431 DEBUG: NumSectors is 1904
2013-04-23 18:31:41,289 firehose.py 1442 DEBUG: 16 SectorsWritten and 1888 NumSectors to go
2013-04-23 18:31:41,289 firehose.py 1405 DEBUG:
(144) (H020) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1888) (on the channel)
2013-04-23 18:31:41,289 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,289 common.py 628 INFO: (144) (H020) SendRawData(08192 bytes)
2013-04-23 18:31:41,289 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,289 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0144) (H0020)
2013-04-23 18:31:41,289 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,289 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,289 firehose.py 1431 DEBUG: NumSectors is 1888
2013-04-23 18:31:41,289 firehose.py 1442 DEBUG: 16 SectorsWritten and 1872 NumSectors to go
2013-04-23 18:31:41,289 firehose.py 1405 DEBUG:
(145) (H021) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1872) (on the channel)
2013-04-23 18:31:41,289 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,289 common.py 628 INFO: (145) (H021) SendRawData(08192 bytes)
2013-04-23 18:31:41,289 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,289 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0145) (H0021)
2013-04-23 18:31:41,289 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,289 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,289 firehose.py 1431 DEBUG: NumSectors is 1872
2013-04-23 18:31:41,289 firehose.py 1442 DEBUG: 16 SectorsWritten and 1856 NumSectors to go
2013-04-23 18:31:41,289 firehose.py 1405 DEBUG:
(146) (H022) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1856) (on the channel)
2013-04-23 18:31:41,289 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,289 common.py 628 INFO: (146) (H022) SendRawData(08192 bytes)
2013-04-23 18:31:41,289 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,289 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0146) (H0022)
2013-04-23 18:31:41,289 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
```


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```
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,289 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,289 firehose.py 1431 DEBUG: NumSectors is 1856
2013-04-23 18:31:41,289 firehose.py 1442 DEBUG: 16 SectorsWritten and 1840 NumSectors to go
2013-04-23 18:31:41,289 firehose.py 1405 DEBUG:
(147) (H023) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1840) (on the channel)
2013-04-23 18:31:41,289 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,289 common.py 628 INFO: (147) (H023) SendRawData(08192 bytes)
2013-04-23 18:31:41,289 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,289 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0147) (H0023)
2013-04-23 18:31:41,289 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,289 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,289 firehose.py 1431 DEBUG: NumSectors is 1840
2013-04-23 18:31:41,289 firehose.py 1442 DEBUG: 16 SectorsWritten and 1824 NumSectors to go
2013-04-23 18:31:41,289 firehose.py 1405 DEBUG:
(148) (H024) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1824) (on the channel)
2013-04-23 18:31:41,289 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,289 common.py 628 INFO: (148) (H024) SendRawData(08192 bytes)
2013-04-23 18:31:41,289 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,289 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0148) (H0024)
2013-04-23 18:31:41,289 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,289 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,289 firehose.py 1431 DEBUG: NumSectors is 1824
2013-04-23 18:31:41,289 firehose.py 1442 DEBUG: 16 SectorsWritten and 1808 NumSectors to go
2013-04-23 18:31:41,289 firehose.py 1405 DEBUG:
(149) (H025) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1808) (on the channel)
2013-04-23 18:31:41,289 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,289 common.py 628 INFO: (149) (H025) SendRawData(08192 bytes)
2013-04-23 18:31:41,289 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,289 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0149) (H0025)
2013-04-23 18:31:41,289 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,289 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,289 firehose.py 1431 DEBUG: NumSectors is 1808
2013-04-23 18:31:41,289 firehose.py 1442 DEBUG: 16 SectorsWritten and 1792 NumSectors to go
2013-04-23 18:31:41,289 firehose.py 1405 DEBUG:
(150) (H026) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1792) (on the channel)
2013-04-23 18:31:41,289 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,289 common.py 628 INFO: (150) (H026) SendRawData(08192 bytes)
2013-04-23 18:31:41,289 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,289 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0150) (H0026)
2013-04-23 18:31:41,289 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
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```
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,305 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,305 firehose.py 1431 DEBUG: NumSectors is 1792
2013-04-23 18:31:41,305 firehose.py 1442 DEBUG: 16 SectorsWritten and 1776 NumSectors to go
2013-04-23 18:31:41,305 firehose.py 1405 DEBUG:
(151) (H027) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1776) (on the channel)
2013-04-23 18:31:41,305 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,305 common.py 628 INFO: (151) (H027) SendRawData(08192 bytes)
2013-04-23 18:31:41,305 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,305 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0151) (H0027)
2013-04-23 18:31:41,305 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,305 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,305 firehose.py 1431 DEBUG: NumSectors is 1776
2013-04-23 18:31:41,305 firehose.py 1442 DEBUG: 16 SectorsWritten and 1760 NumSectors to go
2013-04-23 18:31:41,305 firehose.py 1405 DEBUG:
(152) (H028) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1760) (on the channel)
2013-04-23 18:31:41,305 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,305 common.py 628 INFO: (152) (H028) SendRawData(08192 bytes)
2013-04-23 18:31:41,305 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,305 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0152) (H0028)
2013-04-23 18:31:41,305 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,305 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,305 firehose.py 1431 DEBUG: NumSectors is 1760
2013-04-23 18:31:41,305 firehose.py 1442 DEBUG: 16 SectorsWritten and 1744 NumSectors to go
2013-04-23 18:31:41,305 firehose.py 1405 DEBUG:
(153) (H029) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1744) (on the channel)
2013-04-23 18:31:41,305 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,305 common.py 628 INFO: (153) (H029) SendRawData(08192 bytes)
2013-04-23 18:31:41,305 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,305 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0153) (H0029)
2013-04-23 18:31:41,305 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,305 firehose.py 189 INFO:    _                _      _       _    _
2013-04-23 18:31:41,305 firehose.py 190 INFO:   | |             | |     | |      | |   | |
2013-04-23 18:31:41,305 firehose.py 191 INFO:   | |             | |     | |      | |   | |
2013-04-23 18:31:41,305 firehose.py 192 INFO:   | '  \ /  ` /   | '  \  |   /  ` | '  \| |/   \
2013-04-23 18:31:41,305 firehose.py 193 INFO:   | | | | (_| \__ \ | | | | || (_| | |_) | |  __/
2013-04-23 18:31:41,305 firehose.py 194 INFO:   |_| |_|\__,_|___/_| |_|  \__\__,_|_.__/|_|\___|
2013-04-23 18:31:41,305 firehose.py 196 INFO: FIREHOSE: Since common.CurrentDigestLocation=30, Need to send
digest table here digest file offset=3968
2013-04-23 18:31:41,305 firehose.py 197 INFO: FIREHOSE: Sending DIGEST TABLE 4 (zero based array)
2013-04-23 18:31:41,305 common.py 2059 INFO:

        Looking for 'ChainedTableOfDigests.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:41,305 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin (7.41 KB) (15 sectors)

2013-04-23 18:31:41,305 firehose.py 229 DEBUG: Filename: 'D:\Dropbox\zenos paradox\ChainedTableOfDigests.bin'
(7.41 KB)
```


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```
2013-04-23 18:31:41,305 firehose.py 241 INFO: FileSizeInSectors 15
2013-04-23 18:31:41,305 firehose.py 242 INFO: digest_file_offset 3968
2013-04-23 18:31:41,305 firehose.py 243 INFO: num_file_sectors 8
2013-04-23 18:31:41,305 firehose.py 244 INFO: start_sector 0
2013-04-23 18:31:41,305 firehose.py 245 INFO: PayloadSize is 1 sectors (992 bytes)
2013-04-23 18:31:41,319 firehose.py 249 INFO: CHANGED num file sectors is 1
2013-04-23 18:31:41,319 firehose.py 262 INFO: DIGEST_TABLE seeking to byte location 3968
2013-04-23 18:31:41,319 firehose.py 272 INFO: NOTE: PayloadSize is 992
2013-04-23 18:31:41,319 firehose.py 278 DEBUG: NOTE: Trying to read 992 bytes from
'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
2013-04-23 18:31:41,319 common.py 1859 DEBUG: SendRawData(992 bytes)
2013-04-23 18:31:41,319 common.py 628 INFO: (154) (H030) SendRawData(00992 bytes)
2013-04-23 18:31:41,319 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,319 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 992 bytes TO BE SENT CHANNEL
(P0154) (H0030)
2013-04-23 18:31:41,319 common.py 782 DEBUG:

        Truncating 992 bytes
        9F 1D CB C3 5C 35 0D 60 27 F9 8B E0 F5 C8 B4 3B        ....\5.`'......;
        ...
        49 08 E4 B8 2A 4A 8C C7 F3 66 B2 6A AF 9D 89 B3        I...*J...f.j....
(sha256 f8374d98388e29c82c6eb56762705f79b77151927023ba6e86f9eedde49ff09c)


2013-04-23 18:31:41,319 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX Buffer holds 0 bytes
2013-04-23 18:31:41,319 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:41,319 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:41,335 common.py 1343 DEBUG:          <==(channel data) 76 NEW BYTES READ FROM CHANNEL
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31        <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54        .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65        F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43        sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                    K" /></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 18:31:41,335 common.py 1621 DEBUG:
=============================================================================
2013-04-23 18:31:41,335 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 18:31:41,335 common.py 1623 DEBUG:
==============================================================================
2013-04-23 18:31:41,335 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 18:31:41,335 common.py 1625 DEBUG:
==============================================================================

2013-04-23 18:31:41,335 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:41,335 firehose.py 305 INFO: DIGEST TABLE ACCEPTED (992 HASHES) - Just RESET
common.CurrentDigestLocation to 0, since now using a new table
2013-04-23 18:31:41,335 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,335 firehose.py 1431 DEBUG: NumSectors is 1744
2013-04-23 18:31:41,335 firehose.py 1442 DEBUG: 16 SectorsWritten and 1728 NumSectors to go
2013-04-23 18:31:41,335 firehose.py 1405 DEBUG:
(155) (H000) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1728) (on the channel)
2013-04-23 18:31:41,335 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,335 common.py 628 INFO: (155) (H000) SendRawData(08192 bytes)
2013-04-23 18:31:41,335 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,335 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0155) (H0000)
2013-04-23 18:31:41,335 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00        ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00        ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,335 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,335 firehose.py 1431 DEBUG: NumSectors is 1728
```


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```
2013-04-23 18:31:41,335 firehose.py 1442 DEBUG: 16 SectorsWritten and 1712 NumSectors to go
2013-04-23 18:31:41,335 firehose.py 1405 DEBUG:
(156) (H001) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1712) (on the channel)
2013-04-23 18:31:41,335 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,335 common.py 628 INFO: (156) (H001) SendRawData(08192 bytes)
2013-04-23 18:31:41,335 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,335 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0156) (H0001)
2013-04-23 18:31:41,335 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,335 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,335 firehose.py 1431 DEBUG: NumSectors is 1712
2013-04-23 18:31:41,335 firehose.py 1442 DEBUG: 16 SectorsWritten and 1696 NumSectors to go
2013-04-23 18:31:41,335 firehose.py 1448 INFO: 58% (elapsed=0.0780)       2.50MBps (WRITE)
2013-04-23 18:31:41,335 firehose.py 1405 DEBUG:
(157) (H002) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1696) (on the channel)
2013-04-23 18:31:41,335 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,335 common.py 628 INFO: (157) (H002) SendRawData(08192 bytes)
2013-04-23 18:31:41,335 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,335 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0157) (H0002)
2013-04-23 18:31:41,335 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,335 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,335 firehose.py 1431 DEBUG: NumSectors is 1696
2013-04-23 18:31:41,335 firehose.py 1442 DEBUG: 16 SectorsWritten and 1680 NumSectors to go
2013-04-23 18:31:41,335 firehose.py 1405 DEBUG:
(158) (H003) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1680) (on the channel)
2013-04-23 18:31:41,335 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,335 common.py 628 INFO: (158) (H003) SendRawData(08192 bytes)
2013-04-23 18:31:41,335 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,335 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0158) (H0003)
2013-04-23 18:31:41,335 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,335 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,335 firehose.py 1431 DEBUG: NumSectors is 1680
2013-04-23 18:31:41,335 firehose.py 1442 DEBUG: 16 SectorsWritten and 1664 NumSectors to go
2013-04-23 18:31:41,335 firehose.py 1405 DEBUG:
(159) (H004) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1664) (on the channel)
2013-04-23 18:31:41,335 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,335 common.py 628 INFO: (159) (H004) SendRawData(08192 bytes)
2013-04-23 18:31:41,335 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,335 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0159) (H0004)
2013-04-23 18:31:41,335 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,335 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,335 firehose.py 1431 DEBUG: NumSectors is 1664
```


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```
2013-04-23 18:31:41,335 firehose.py 1442 DEBUG: 16 SectorsWritten and 1648 NumSectors to go
2013-04-23 18:31:41,335 firehose.py 1405 DEBUG:
(160) (H005) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1648) (on the channel)
2013-04-23 18:31:41,335 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,335 common.py 628 INFO: (160) (H005) SendRawData(08192 bytes)
2013-04-23 18:31:41,335 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,335 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0160) (H0005)
2013-04-23 18:31:41,335 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,335 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,335 firehose.py 1431 DEBUG: NumSectors is 1648
2013-04-23 18:31:41,335 firehose.py 1442 DEBUG: 16 SectorsWritten and 1632 NumSectors to go
2013-04-23 18:31:41,335 firehose.py 1405 DEBUG:
(161) (H006) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1632) (on the channel)
2013-04-23 18:31:41,351 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,351 common.py 628 INFO: (161) (H006) SendRawData(08192 bytes)
2013-04-23 18:31:41,351 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,351 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0161) (H0006)
2013-04-23 18:31:41,351 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,351 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,351 firehose.py 1431 DEBUG: NumSectors is 1632
2013-04-23 18:31:41,351 firehose.py 1442 DEBUG: 16 SectorsWritten and 1616 NumSectors to go
2013-04-23 18:31:41,351 firehose.py 1405 DEBUG:
(162) (H007) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1616) (on the channel)
2013-04-23 18:31:41,351 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,351 common.py 628 INFO: (162) (H007) SendRawData(08192 bytes)
2013-04-23 18:31:41,351 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,351 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0162) (H0007)
2013-04-23 18:31:41,351 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,351 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,351 firehose.py 1431 DEBUG: NumSectors is 1616
2013-04-23 18:31:41,351 firehose.py 1442 DEBUG: 16 SectorsWritten and 1600 NumSectors to go
2013-04-23 18:31:41,351 firehose.py 1405 DEBUG:
(163) (H008) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1600) (on the channel)
2013-04-23 18:31:41,351 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,351 common.py 628 INFO: (163) (H008) SendRawData(08192 bytes)
2013-04-23 18:31:41,351 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,351 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0163) (H0008)
2013-04-23 18:31:41,351 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,351 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,351 firehose.py 1431 DEBUG: NumSectors is 1600
2013-04-23 18:31:41,351 firehose.py 1442 DEBUG: 16 SectorsWritten and 1584 NumSectors to go
```


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```
2013-04-23 18:31:41,351 firehose.py 1405 DEBUG:
(164) (H009) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1584) (on the channel)
2013-04-23 18:31:41,351 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,351 common.py 628 INFO: (164) (H009) SendRawData(08192 bytes)
2013-04-23 18:31:41,351 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,351 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0164) (H0009)
2013-04-23 18:31:41,351 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,351 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,351 firehose.py 1431 DEBUG: NumSectors is 1584
2013-04-23 18:31:41,351 firehose.py 1442 DEBUG: 16 SectorsWritten and 1568 NumSectors to go
2013-04-23 18:31:41,351 firehose.py 1405 DEBUG:
(165) (H010) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1568) (on the channel)
2013-04-23 18:31:41,351 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,351 common.py 628 INFO: (165) (H010) SendRawData(08192 bytes)
2013-04-23 18:31:41,351 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,351 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0165) (H0010)
2013-04-23 18:31:41,351 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,351 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,351 firehose.py 1431 DEBUG: NumSectors is 1568
2013-04-23 18:31:41,351 firehose.py 1442 DEBUG: 16 SectorsWritten and 1552 NumSectors to go
2013-04-23 18:31:41,351 firehose.py 1405 DEBUG:
(166) (H011) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1552) (on the channel)
2013-04-23 18:31:41,351 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,351 common.py 628 INFO: (166) (H011) SendRawData(08192 bytes)
2013-04-23 18:31:41,351 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,351 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0166) (H0011)
2013-04-23 18:31:41,351 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,351 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,351 firehose.py 1431 DEBUG: NumSectors is 1552
2013-04-23 18:31:41,351 firehose.py 1442 DEBUG: 16 SectorsWritten and 1536 NumSectors to go
2013-04-23 18:31:41,351 firehose.py 1405 DEBUG:
(167) (H012) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1536) (on the channel)
2013-04-23 18:31:41,351 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,351 common.py 628 INFO: (167) (H012) SendRawData(08192 bytes)
2013-04-23 18:31:41,351 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,351 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0167) (H0012)
2013-04-23 18:31:41,351 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,351 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,351 firehose.py 1431 DEBUG: NumSectors is 1536
2013-04-23 18:31:41,367 firehose.py 1442 DEBUG: 16 SectorsWritten and 1520 NumSectors to go
2013-04-23 18:31:41,367 firehose.py 1405 DEBUG:
```


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```
(168) (H013) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1520) (on the channel)
2013-04-23 18:31:41,367 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,367 common.py 628 INFO: (168) (H013) SendRawData(08192 bytes)
2013-04-23 18:31:41,367 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,367 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0168) (H0013)
2013-04-23 18:31:41,367 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,367 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,367 firehose.py 1431 DEBUG: NumSectors is 1520
2013-04-23 18:31:41,367 firehose.py 1442 DEBUG: 16 SectorsWritten and 1504 NumSectors to go
2013-04-23 18:31:41,367 firehose.py 1405 DEBUG:
(169) (H014) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1504) (on the channel)
2013-04-23 18:31:41,367 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,367 common.py 628 INFO: (169) (H014) SendRawData(08192 bytes)
2013-04-23 18:31:41,367 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,367 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0169) (H0014)
2013-04-23 18:31:41,367 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,367 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,367 firehose.py 1431 DEBUG: NumSectors is 1504
2013-04-23 18:31:41,367 firehose.py 1442 DEBUG: 16 SectorsWritten and 1488 NumSectors to go
2013-04-23 18:31:41,367 firehose.py 1405 DEBUG:
(170) (H015) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1488) (on the channel)
2013-04-23 18:31:41,367 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,367 common.py 628 INFO: (170) (H015) SendRawData(08192 bytes)
2013-04-23 18:31:41,367 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,367 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0170) (H0015)
2013-04-23 18:31:41,367 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,367 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,367 firehose.py 1431 DEBUG: NumSectors is 1488
2013-04-23 18:31:41,367 firehose.py 1442 DEBUG: 16 SectorsWritten and 1472 NumSectors to go
2013-04-23 18:31:41,367 firehose.py 1405 DEBUG:
(171) (H016) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1472) (on the channel)
2013-04-23 18:31:41,367 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,367 common.py 628 INFO: (171) (H016) SendRawData(08192 bytes)
2013-04-23 18:31:41,367 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,367 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0171) (H0016)
2013-04-23 18:31:41,367 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,367 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,367 firehose.py 1431 DEBUG: NumSectors is 1472
2013-04-23 18:31:41,367 firehose.py 1442 DEBUG: 16 SectorsWritten and 1456 NumSectors to go
2013-04-23 18:31:41,367 firehose.py 1405 DEBUG:
(172) (H017) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1456) (on the channel)
```


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```
2013-04-23 18:31:41,367 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,367 common.py 628 INFO: (172) (H017) SendRawData(08192 bytes)
2013-04-23 18:31:41,367 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,367 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0172) (H0017)
2013-04-23 18:31:41,367 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,367 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,367 firehose.py 1431 DEBUG: NumSectors is 1456
2013-04-23 18:31:41,367 firehose.py 1442 DEBUG: 16 SectorsWritten and 1440 NumSectors to go
2013-04-23 18:31:41,367 firehose.py 1405 DEBUG:
(173) (H018) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1440) (on the channel)
2013-04-23 18:31:41,367 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,367 common.py 628 INFO: (173) (H018) SendRawData(08192 bytes)
2013-04-23 18:31:41,367 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,367 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0173) (H0018)
2013-04-23 18:31:41,367 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,367 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,367 firehose.py 1431 DEBUG: NumSectors is 1440
2013-04-23 18:31:41,367 firehose.py 1442 DEBUG: 16 SectorsWritten and 1424 NumSectors to go
2013-04-23 18:31:41,367 firehose.py 1405 DEBUG:
(174) (H019) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1424) (on the channel)
2013-04-23 18:31:41,367 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,367 common.py 628 INFO: (174) (H019) SendRawData(08192 bytes)
2013-04-23 18:31:41,367 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,367 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0174) (H0019)
2013-04-23 18:31:41,367 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,382 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,382 firehose.py 1431 DEBUG: NumSectors is 1424
2013-04-23 18:31:41,382 firehose.py 1442 DEBUG: 16 SectorsWritten and 1408 NumSectors to go
2013-04-23 18:31:41,382 firehose.py 1405 DEBUG:
(175) (H020) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1408) (on the channel)
2013-04-23 18:31:41,382 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,382 common.py 628 INFO: (175) (H020) SendRawData(08192 bytes)
2013-04-23 18:31:41,382 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,382 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0175) (H0020)
2013-04-23 18:31:41,382 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,382 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,382 firehose.py 1431 DEBUG: NumSectors is 1408
2013-04-23 18:31:41,382 firehose.py 1442 DEBUG: 16 SectorsWritten and 1392 NumSectors to go
2013-04-23 18:31:41,382 firehose.py 1405 DEBUG:
(176) (H021) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1392) (on the channel)
2013-04-23 18:31:41,382 common.py 1859 DEBUG: SendRawData(8192 bytes)
```


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```
2013-04-23 18:31:41,382 common.py 628 INFO: (176) (H021) SendRawData(08192 bytes)
2013-04-23 18:31:41,382 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,382 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0176) (H0021)
2013-04-23 18:31:41,382 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,382 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,382 firehose.py 1431 DEBUG: NumSectors is 1392
2013-04-23 18:31:41,382 firehose.py 1442 DEBUG: 16 SectorsWritten and 1376 NumSectors to go
2013-04-23 18:31:41,382 firehose.py 1405 DEBUG:
(177) (H022) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1376) (on the channel)
2013-04-23 18:31:41,382 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,382 common.py 628 INFO: (177) (H022) SendRawData(08192 bytes)
2013-04-23 18:31:41,382 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,382 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0177) (H0022)
2013-04-23 18:31:41,382 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,382 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,382 firehose.py 1431 DEBUG: NumSectors is 1376
2013-04-23 18:31:41,382 firehose.py 1442 DEBUG: 16 SectorsWritten and 1360 NumSectors to go
2013-04-23 18:31:41,382 firehose.py 1405 DEBUG:
(178) (H023) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1360) (on the channel)
2013-04-23 18:31:41,382 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,382 common.py 628 INFO: (178) (H023) SendRawData(08192 bytes)
2013-04-23 18:31:41,382 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,382 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0178) (H0023)
2013-04-23 18:31:41,382 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,382 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,382 firehose.py 1431 DEBUG: NumSectors is 1360
2013-04-23 18:31:41,382 firehose.py 1442 DEBUG: 16 SectorsWritten and 1344 NumSectors to go
2013-04-23 18:31:41,382 firehose.py 1405 DEBUG:
(179) (H024) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1344) (on the channel)
2013-04-23 18:31:41,382 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,382 common.py 628 INFO: (179) (H024) SendRawData(08192 bytes)
2013-04-23 18:31:41,382 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,382 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0179) (H0024)
2013-04-23 18:31:41,382 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,382 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,382 firehose.py 1431 DEBUG: NumSectors is 1344
2013-04-23 18:31:41,382 firehose.py 1442 DEBUG: 16 SectorsWritten and 1328 NumSectors to go
2013-04-23 18:31:41,382 firehose.py 1405 DEBUG:
(180) (H025) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1328) (on the channel)
2013-04-23 18:31:41,382 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,382 common.py 628 INFO: (180) (H025) SendRawData(08192 bytes)
```


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```
2013-04-23 18:31:41,382 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,382 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0180) (H0025)
2013-04-23 18:31:41,382 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,382 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,382 firehose.py 1431 DEBUG: NumSectors is 1328
2013-04-23 18:31:41,382 firehose.py 1442 DEBUG: 16 SectorsWritten and 1312 NumSectors to go
2013-04-23 18:31:41,382 firehose.py 1405 DEBUG:
(181) (H026) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1312) (on the channel)
2013-04-23 18:31:41,382 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,382 common.py 628 INFO: (181) (H026) SendRawData(08192 bytes)
2013-04-23 18:31:41,382 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,382 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0181) (H0026)
2013-04-23 18:31:41,382 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,398 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,398 firehose.py 1431 DEBUG: NumSectors is 1312
2013-04-23 18:31:41,398 firehose.py 1442 DEBUG: 16 SectorsWritten and 1296 NumSectors to go
2013-04-23 18:31:41,398 firehose.py 1448 INFO: 68% (elapsed=0.0620)       3.15MBps (WRITE)
2013-04-23 18:31:41,398 firehose.py 1405 DEBUG:
(182) (H027) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1296) (on the channel)
2013-04-23 18:31:41,398 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,398 common.py 628 INFO: (182) (H027) SendRawData(08192 bytes)
2013-04-23 18:31:41,398 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,398 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0182) (H0027)
2013-04-23 18:31:41,398 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,398 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,398 firehose.py 1431 DEBUG: NumSectors is 1296
2013-04-23 18:31:41,398 firehose.py 1442 DEBUG: 16 SectorsWritten and 1280 NumSectors to go
2013-04-23 18:31:41,398 firehose.py 1405 DEBUG:
(183) (H028) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1280) (on the channel)
2013-04-23 18:31:41,398 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,398 common.py 628 INFO: (183) (H028) SendRawData(08192 bytes)
2013-04-23 18:31:41,398 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,398 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0183) (H0028)
2013-04-23 18:31:41,398 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,398 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,398 firehose.py 1431 DEBUG: NumSectors is 1280
2013-04-23 18:31:41,398 firehose.py 1442 DEBUG: 16 SectorsWritten and 1264 NumSectors to go
2013-04-23 18:31:41,398 firehose.py 1405 DEBUG:
(184) (H029) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1264) (on the channel)
2013-04-23 18:31:41,398 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,398 common.py 628 INFO: (184) (H029) SendRawData(08192 bytes)
```


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```
2013-04-23 18:31:41,398 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,398 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0184) (H0029)
2013-04-23 18:31:41,398 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,398 firehose.py 189 INFO:    _                _       _        _     _
2013-04-23 18:31:41,398 firehose.py 190 INFO:   | |              | |     | |      | |   | |
2013-04-23 18:31:41,398 firehose.py 191 INFO:   | |__   __ _ ___| |__   | |_ __ _| |__ | | ___
2013-04-23 18:31:41,398 firehose.py 192 INFO:   | '_ \ / _` / __| '_ \  | __/ _` | '_ \| |/ _ \
2013-04-23 18:31:41,398 firehose.py 193 INFO:   | | | | (_| \__ \ | | | | || (_| | |_) | |  __/
2013-04-23 18:31:41,398 firehose.py 194 INFO:   |_| |_|\__,_|___/_| |_|  \__\__,_|_.__/|_|\___|
2013-04-23 18:31:41,398 firehose.py 196 INFO: FIREHOSE: Since common.CurrentDigestLocation=30, Need to send
digest table here digest_file_offset=4960
2013-04-23 18:31:41,398 firehose.py 197 INFO: FIREHOSE: Sending DIGEST TABLE 5 (zero based array)
2013-04-23 18:31:41,398 common.py 2059 INFO:

        Looking for 'ChainedTableOfDigests.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:41,398 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin (7.41 KB) (15 sectors)

2013-04-23 18:31:41,398 firehose.py 229 DEBUG: Filename: 'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
(7.41 KB)
2013-04-23 18:31:41,398 firehose.py 241 INFO: FileSizeInSectors 15
2013-04-23 18:31:41,398 firehose.py 242 INFO: digest_file_offset 4960
2013-04-23 18:31:41,398 firehose.py 243 INFO: num_file_sectors 6
2013-04-23 18:31:41,398 firehose.py 244 INFO: start_sector 0
2013-04-23 18:31:41,414 firehose.py 245 INFO: PayloadSize is 1 sectors (992 bytes)
2013-04-23 18:31:41,414 firehose.py 249 INFO: CHANGED num_file_sectors is 1
2013-04-23 18:31:41,414 firehose.py 262 INFO: DIGEST TABLE seeking to byte location 4960
2013-04-23 18:31:41,414 firehose.py 272 INFO: NOTE: PayloadSize is 992
2013-04-23 18:31:41,414 firehose.py 278 DEBUG: NOTE: Trying to read 992 bytes from
'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
2013-04-23 18:31:41,414 common.py 1859 DEBUG: SendRawData(992 bytes)
2013-04-23 18:31:41,414 common.py 628 INFO: (185) (H030) SendRawData(00992 bytes)
2013-04-23 18:31:41,414 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,414 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 992 bytes TO BE SENT CHANNEL
(P0185) (H0030)
2013-04-23 18:31:41,414 common.py 782 DEBUG:

        Truncating 992 bytes
        9F 1D CB C3 5C 35 0D 60 27 F9 8B E0 F5 C8 B4 3B         ....\5.`'......;
        ...
        0F E8 1E A2 BB C2 BC 96 64 FA 4B AF 5F 4D 92 AA         ........d.K. M..
(sha256 95715fdf9635b04001f997170538de524908e4b82a4a8cc7f366b26aaf9d89b3)


2013-04-23 18:31:41,414 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX Buffer holds 0 bytes
2013-04-23 18:31:41,414 common.py 1583 DEBUG: FIREHOSE: RX Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:41,414 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:41,428 common.py 1343 DEBUG:           <==(channel data) 76 NEW BYTES READ FROM CHANNEL
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54         .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65         F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43         sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                     K" /></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 18:31:41,428 common.py 1621 DEBUG:
===============================================================================
2013-04-23 18:31:41,428 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 18:31:41,428 common.py 1623 DEBUG:
===============================================================================
2013-04-23 18:31:41,428 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
```


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```
</data>


2013-04-23 18:31:41,428 common.py 1625 DEBUG:
==============================================================================

2013-04-23 18:31:41,428 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:41,428 firehose.py 305 INFO: DIGEST TABLE ACCEPTED (992 HASHES) - Just RESET
common.CurrentDigestLocation to 0, since now using a new table
2013-04-23 18:31:41,428 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,428 firehose.py 1431 DEBUG: NumSectors is 1264
2013-04-23 18:31:41,428 firehose.py 1442 DEBUG: 16 SectorsWritten and 1248 NumSectors to go
2013-04-23 18:31:41,428 firehose.py 1405 DEBUG:
(186) (H000) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1248) (on the channel)
2013-04-23 18:31:41,428 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,428 common.py 628 INFO: (186) (H000) SendRawData(08192 bytes)
2013-04-23 18:31:41,428 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,428 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0186) (H0000)
2013-04-23 18:31:41,428 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,428 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,428 firehose.py 1431 DEBUG: NumSectors is 1248
2013-04-23 18:31:41,428 firehose.py 1442 DEBUG: 16 SectorsWritten and 1232 NumSectors to go
2013-04-23 18:31:41,428 firehose.py 1405 DEBUG:
(187) (H001) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1232) (on the channel)
2013-04-23 18:31:41,428 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,428 common.py 628 INFO: (187) (H001) SendRawData(08192 bytes)
2013-04-23 18:31:41,428 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,428 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0187) (H0001)
2013-04-23 18:31:41,428 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,428 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,428 firehose.py 1431 DEBUG: NumSectors is 1232
2013-04-23 18:31:41,428 firehose.py 1442 DEBUG: 16 SectorsWritten and 1216 NumSectors to go
2013-04-23 18:31:41,428 firehose.py 1405 DEBUG:
(188) (H002) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1216) (on the channel)
2013-04-23 18:31:41,428 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,428 common.py 628 INFO: (188) (H002) SendRawData(08192 bytes)
2013-04-23 18:31:41,428 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,428 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0188) (H0002)
2013-04-23 18:31:41,428 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,428 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,428 firehose.py 1431 DEBUG: NumSectors is 1216
2013-04-23 18:31:41,428 firehose.py 1442 DEBUG: 16 SectorsWritten and 1200 NumSectors to go
2013-04-23 18:31:41,428 firehose.py 1405 DEBUG:
(189) (H003) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1200) (on the channel)
2013-04-23 18:31:41,428 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,428 common.py 628 INFO: (189) (H003) SendRawData(08192 bytes)
2013-04-23 18:31:41,428 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,428 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0189) (H0003)
2013-04-23 18:31:41,428 common.py 782 DEBUG:
```


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```
        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,428 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,428 firehose.py 1431 DEBUG: NumSectors is 1200
2013-04-23 18:31:41,428 firehose.py 1442 DEBUG: 16 SectorsWritten and 1184 NumSectors to go
2013-04-23 18:31:41,428 firehose.py 1405 DEBUG:
(190) (H004) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1184) (on the channel)
2013-04-23 18:31:41,428 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,428 common.py 628 INFO: (190) (H004) SendRawData(08192 bytes)
2013-04-23 18:31:41,428 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,428 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0190) (H0004)
2013-04-23 18:31:41,428 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,428 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,428 firehose.py 1431 DEBUG: NumSectors is 1184
2013-04-23 18:31:41,428 firehose.py 1442 DEBUG: 16 SectorsWritten and 1168 NumSectors to go
2013-04-23 18:31:41,428 firehose.py 1405 DEBUG:
(191) (H005) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1168) (on the channel)
2013-04-23 18:31:41,428 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,428 common.py 628 INFO: (191) (H005) SendRawData(08192 bytes)
2013-04-23 18:31:41,428 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,428 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0191) (H0005)
2013-04-23 18:31:41,428 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,428 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,428 firehose.py 1431 DEBUG: NumSectors is 1168
2013-04-23 18:31:41,428 firehose.py 1442 DEBUG: 16 SectorsWritten and 1152 NumSectors to go
2013-04-23 18:31:41,428 firehose.py 1405 DEBUG:
(192) (H006) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1152) (on the channel)
2013-04-23 18:31:41,428 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,428 common.py 628 INFO: (192) (H006) SendRawData(08192 bytes)
2013-04-23 18:31:41,428 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,428 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0192) (H0006)
2013-04-23 18:31:41,444 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,444 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,444 firehose.py 1431 DEBUG: NumSectors is 1152
2013-04-23 18:31:41,444 firehose.py 1442 DEBUG: 16 SectorsWritten and 1136 NumSectors to go
2013-04-23 18:31:41,444 firehose.py 1405 DEBUG:
(193) (H007) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1136) (on the channel)
2013-04-23 18:31:41,444 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,444 common.py 628 INFO: (193) (H007) SendRawData(08192 bytes)
2013-04-23 18:31:41,444 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,444 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0193) (H0007)
2013-04-23 18:31:41,444 common.py 782 DEBUG:
```


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```
        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,444 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,444 firehose.py 1431 DEBUG: NumSectors is 1136
2013-04-23 18:31:41,444 firehose.py 1442 DEBUG: 16 SectorsWritten and 1120 NumSectors to go
2013-04-23 18:31:41,444 firehose.py 1405 DEBUG:
(194) (H008) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1120) (on the channel)
2013-04-23 18:31:41,444 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,444 common.py 628 INFO: (194) (H008) SendRawData(08192 bytes)
2013-04-23 18:31:41,444 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,444 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0194) (H0008)
2013-04-23 18:31:41,444 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,444 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,444 firehose.py 1431 DEBUG: NumSectors is 1120
2013-04-23 18:31:41,444 firehose.py 1442 DEBUG: 16 SectorsWritten and 1104 NumSectors to go
2013-04-23 18:31:41,444 firehose.py 1405 DEBUG:
(195) (H009) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1104) (on the channel)
2013-04-23 18:31:41,444 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,444 common.py 628 INFO: (195) (H009) SendRawData(08192 bytes)
2013-04-23 18:31:41,444 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,444 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0195) (H0009)
2013-04-23 18:31:41,444 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,444 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,444 firehose.py 1431 DEBUG: NumSectors is 1104
2013-04-23 18:31:41,444 firehose.py 1442 DEBUG: 16 SectorsWritten and 1088 NumSectors to go
2013-04-23 18:31:41,444 firehose.py 1405 DEBUG:
(196) (H010) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1088) (on the channel)
2013-04-23 18:31:41,444 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,444 common.py 628 INFO: (196) (H010) SendRawData(08192 bytes)
2013-04-23 18:31:41,444 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,444 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0196) (H0010)
2013-04-23 18:31:41,444 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,444 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,444 firehose.py 1431 DEBUG: NumSectors is 1088
2013-04-23 18:31:41,444 firehose.py 1442 DEBUG: 16 SectorsWritten and 1072 NumSectors to go
2013-04-23 18:31:41,444 firehose.py 1405 DEBUG:
(197) (H011) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1072) (on the channel)
2013-04-23 18:31:41,444 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,444 common.py 628 INFO: (197) (H011) SendRawData(08192 bytes)
2013-04-23 18:31:41,444 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,444 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0197) (H0011)
2013-04-23 18:31:41,444 common.py 782 DEBUG:

        Truncating 8192 bytes
```


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```
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,444 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,444 firehose.py 1431 DEBUG: NumSectors is 1072
2013-04-23 18:31:41,444 firehose.py 1442 DEBUG: 16 SectorsWritten and 1056 NumSectors to go
2013-04-23 18:31:41,444 firehose.py 1405 DEBUG:
(198) (H012) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1056) (on the channel)
2013-04-23 18:31:41,444 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,444 common.py 628 INFO: (198) (H012) SendRawData(08192 bytes)
2013-04-23 18:31:41,444 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,444 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0198) (H0012)
2013-04-23 18:31:41,444 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,444 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,444 firehose.py 1431 DEBUG: NumSectors is 1056
2013-04-23 18:31:41,444 firehose.py 1442 DEBUG: 16 SectorsWritten and 1040 NumSectors to go
2013-04-23 18:31:41,444 firehose.py 1405 DEBUG:
(199) (H013) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1040) (on the channel)
2013-04-23 18:31:41,444 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,444 common.py 628 INFO: (199) (H013) SendRawData(08192 bytes)
2013-04-23 18:31:41,444 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,444 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0199) (H0013)
2013-04-23 18:31:41,460 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,460 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,460 firehose.py 1431 DEBUG: NumSectors is 1040
2013-04-23 18:31:41,460 firehose.py 1442 DEBUG: 16 SectorsWritten and 1024 NumSectors to go
2013-04-23 18:31:41,460 firehose.py 1405 DEBUG:
(200) (H014) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1024) (on the channel)
2013-04-23 18:31:41,460 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,460 common.py 628 INFO: (200) (H014) SendRawData(08192 bytes)
2013-04-23 18:31:41,460 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,460 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0200) (H0014)
2013-04-23 18:31:41,460 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,460 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,460 firehose.py 1431 DEBUG: NumSectors is 1024
2013-04-23 18:31:41,460 firehose.py 1442 DEBUG: 16 SectorsWritten and 1008 NumSectors to go
2013-04-23 18:31:41,460 firehose.py 1405 DEBUG:
(201) (H015) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=1008) (on the channel)
2013-04-23 18:31:41,460 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,460 common.py 628 INFO: (201) (H015) SendRawData(08192 bytes)
2013-04-23 18:31:41,460 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,460 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0201) (H0015)
2013-04-23 18:31:41,460 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
```


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```
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,460 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,460 firehose.py 1431 DEBUG: NumSectors is 1008
2013-04-23 18:31:41,460 firehose.py 1442 DEBUG: 16 SectorsWritten and 992 NumSectors to go
2013-04-23 18:31:41,460 firehose.py 1405 DEBUG:
(202) (H016) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=992) (on the channel)
2013-04-23 18:31:41,460 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,460 common.py 628 INFO: (202) (H016) SendRawData(08192 bytes)
2013-04-23 18:31:41,460 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,460 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0202) (H0016)
2013-04-23 18:31:41,460 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,460 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,460 firehose.py 1431 DEBUG: NumSectors is 992
2013-04-23 18:31:41,460 firehose.py 1442 DEBUG: 16 SectorsWritten and 976 NumSectors to go
2013-04-23 18:31:41,460 firehose.py 1405 DEBUG:
(203) (H017) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=976) (on the channel)
2013-04-23 18:31:41,460 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,460 common.py 628 INFO: (203) (H017) SendRawData(08192 bytes)
2013-04-23 18:31:41,460 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,460 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0203) (H0017)
2013-04-23 18:31:41,460 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,460 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,460 firehose.py 1431 DEBUG: NumSectors is 976
2013-04-23 18:31:41,460 firehose.py 1442 DEBUG: 16 SectorsWritten and 960 NumSectors to go
2013-04-23 18:31:41,460 firehose.py 1405 DEBUG:
(204) (H018) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=960) (on the channel)
2013-04-23 18:31:41,460 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,460 common.py 628 INFO: (204) (H018) SendRawData(08192 bytes)
2013-04-23 18:31:41,460 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,460 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0204) (H0018)
2013-04-23 18:31:41,460 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,460 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,460 firehose.py 1431 DEBUG: NumSectors is 960
2013-04-23 18:31:41,460 firehose.py 1442 DEBUG: 16 SectorsWritten and 944 NumSectors to go
2013-04-23 18:31:41,460 firehose.py 1405 DEBUG:
(205) (H019) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=944) (on the channel)
2013-04-23 18:31:41,460 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,460 common.py 628 INFO: (205) (H019) SendRawData(08192 bytes)
2013-04-23 18:31:41,460 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,460 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0205) (H0019)
2013-04-23 18:31:41,460 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
```


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```
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,460 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,460 firehose.py 1431 DEBUG: NumSectors is 944
2013-04-23 18:31:41,460 firehose.py 1442 DEBUG: 16 SectorsWritten and 928 NumSectors to go
2013-04-23 18:31:41,460 firehose.py 1405 DEBUG:
(206) (H020) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=928) (on the channel)
2013-04-23 18:31:41,460 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,460 common.py 628 INFO: (206) (H020) SendRawData(08192 bytes)
2013-04-23 18:31:41,476 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,476 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0206) (H0020)
2013-04-23 18:31:41,476 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,476 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,476 firehose.py 1431 DEBUG: NumSectors is 928
2013-04-23 18:31:41,476 firehose.py 1442 DEBUG: 16 SectorsWritten and 912 NumSectors to go
2013-04-23 18:31:41,476 firehose.py 1405 DEBUG:
(207) (H021) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=912) (on the channel)
2013-04-23 18:31:41,476 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,476 common.py 628 INFO: (207) (H021) SendRawData(08192 bytes)
2013-04-23 18:31:41,476 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,476 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0207) (H0021)
2013-04-23 18:31:41,476 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,476 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,476 firehose.py 1431 DEBUG: NumSectors is 912
2013-04-23 18:31:41,476 firehose.py 1442 DEBUG: 16 SectorsWritten and 896 NumSectors to go
2013-04-23 18:31:41,476 firehose.py 1448 INFO: 78% (elapsed=0.0780)       2.50MBps (WRITE)
2013-04-23 18:31:41,476 firehose.py 1405 DEBUG:
(208) (H022) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=896) (on the channel)
2013-04-23 18:31:41,476 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,476 common.py 628 INFO: (208) (H022) SendRawData(08192 bytes)
2013-04-23 18:31:41,476 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,476 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0208) (H0022)
2013-04-23 18:31:41,476 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,476 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,476 firehose.py 1431 DEBUG: NumSectors is 896
2013-04-23 18:31:41,476 firehose.py 1442 DEBUG: 16 SectorsWritten and 880 NumSectors to go
2013-04-23 18:31:41,476 firehose.py 1405 DEBUG:
(209) (H023) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=880) (on the channel)
2013-04-23 18:31:41,476 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,476 common.py 628 INFO: (209) (H023) SendRawData(08192 bytes)
2013-04-23 18:31:41,476 common.py 766 DEBUG:
****************************************************************************
2013-04-23 18:31:41,476 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0209) (H0023)
2013-04-23 18:31:41,476 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
```


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```
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,476 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,476 firehose.py 1431 DEBUG: NumSectors is 880
2013-04-23 18:31:41,476 firehose.py 1442 DEBUG: 16 SectorsWritten and 864 NumSectors to go
2013-04-23 18:31:41,476 firehose.py 1405 DEBUG:
(210) (H024) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=864) (on the channel)
2013-04-23 18:31:41,476 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,476 common.py 628 INFO: (210) (H024) SendRawData(08192 bytes)
2013-04-23 18:31:41,476 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,476 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0210) (H0024)
2013-04-23 18:31:41,476 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,476 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,476 firehose.py 1431 DEBUG: NumSectors is 864
2013-04-23 18:31:41,476 firehose.py 1442 DEBUG: 16 SectorsWritten and 848 NumSectors to go
2013-04-23 18:31:41,476 firehose.py 1405 DEBUG:
(211) (H025) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=848) (on the channel)
2013-04-23 18:31:41,476 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,476 common.py 628 INFO: (211) (H025) SendRawData(08192 bytes)
2013-04-23 18:31:41,476 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,476 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0211) (H0025)
2013-04-23 18:31:41,476 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,476 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,476 firehose.py 1431 DEBUG: NumSectors is 848
2013-04-23 18:31:41,476 firehose.py 1442 DEBUG: 16 SectorsWritten and 832 NumSectors to go
2013-04-23 18:31:41,476 firehose.py 1405 DEBUG:
(212) (H026) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=832) (on the channel)
2013-04-23 18:31:41,476 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,476 common.py 628 INFO: (212) (H026) SendRawData(08192 bytes)
2013-04-23 18:31:41,476 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,476 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0212) (H0026)
2013-04-23 18:31:41,476 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,492 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,492 firehose.py 1431 DEBUG: NumSectors is 832
2013-04-23 18:31:41,492 firehose.py 1442 DEBUG: 16 SectorsWritten and 816 NumSectors to go
2013-04-23 18:31:41,492 firehose.py 1405 DEBUG:
(213) (H027) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=816) (on the channel)
2013-04-23 18:31:41,492 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,492 common.py 628 INFO: (213) (H027) SendRawData(08192 bytes)
2013-04-23 18:31:41,492 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,492 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0213) (H0027)
2013-04-23 18:31:41,492 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
```


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```
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,492 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,492 firehose.py 1431 DEBUG: NumSectors is 816
2013-04-23 18:31:41,492 firehose.py 1442 DEBUG: 16 SectorsWritten and 800 NumSectors to go
2013-04-23 18:31:41,492 firehose.py 1405 DEBUG:
(214) (H028) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=800) (on the channel)
2013-04-23 18:31:41,492 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,492 common.py 628 INFO: (214) (H028) SendRawData(08192 bytes)
2013-04-23 18:31:41,492 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,492 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0214) (H0028)
2013-04-23 18:31:41,492 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,492 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,492 firehose.py 1431 DEBUG: NumSectors is 800
2013-04-23 18:31:41,492 firehose.py 1442 DEBUG: 16 SectorsWritten and 784 NumSectors to go
2013-04-23 18:31:41,492 firehose.py 1405 DEBUG:
(215) (H029) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=784) (on the channel)
2013-04-23 18:31:41,492 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,492 common.py 628 INFO: (215) (H029) SendRawData(08192 bytes)
2013-04-23 18:31:41,492 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,492 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0215) (H0029)
2013-04-23 18:31:41,492 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,492 firehose.py 189 INFO:    _                 _       _        _     _
2013-04-23 18:31:41,492 firehose.py 190 INFO:   | |               | |     | |      | |   | |
2013-04-23 18:31:41,492 firehose.py 191 INFO:   | |__  __ _ ___| |__   | |_ __ _| |__ | | ___
2013-04-23 18:31:41,492 firehose.py 192 INFO:   | '_ \ / _` / __| '_ \  | __/ _` | '_ \| |/ _ \
2013-04-23 18:31:41,492 firehose.py 193 INFO:   | | | | (_| \__ \ | | | | || (_| | |_) | |  __/
2013-04-23 18:31:41,492 firehose.py 194 INFO:   |_| |_|\__,_|___/_| |_|  \__\__,_|_.__/|_|\___|
2013-04-23 18:31:41,492 firehose.py 196 INFO: FIREHOSE: Since common.CurrentDigestLocation=30, Need to send
digest table here digest_file_offset=5952
2013-04-23 18:31:41,492 firehose.py 197 INFO: FIREHOSE: Sending DIGEST TABLE 6 (zero based array)
2013-04-23 18:31:41,492 common.py 2059 INFO:

        Looking for 'ChainedTableOfDigests.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:41,492 common.py 2064 INFO:
        **Found D:\Dropbox\zenos paradox\ChainedTableOfDigests.bin (7.41 KB) (15 sectors)

2013-04-23 18:31:41,492 firehose.py 229 DEBUG: Filename: 'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
(7.41 KB)
2013-04-23 18:31:41,492 firehose.py 241 INFO: FileSizeInSectors 15
2013-04-23 18:31:41,492 firehose.py 242 INFO: digest_file_offset 5952
2013-04-23 18:31:41,492 firehose.py 243 INFO: num_file_sectors 4
2013-04-23 18:31:41,492 firehose.py 244 INFO: start_sector 0
2013-04-23 18:31:41,492 firehose.py 245 INFO: PayloadSize is 1 sectors (992 bytes)
2013-04-23 18:31:41,506 firehose.py 249 INFO: CHANGED num file sectors is 1
2013-04-23 18:31:41,506 firehose.py 262 INFO: DIGEST_TABLE seeking to byte location 5952
2013-04-23 18:31:41,506 firehose.py 272 INFO: NOTE: PayloadSize is 992
2013-04-23 18:31:41,506 firehose.py 278 DEBUG: NOTE: Trying to read 992 bytes from
'D:\Dropbox\zenos paradox\ChainedTableOfDigests.bin'
2013-04-23 18:31:41,506 common.py 1859 DEBUG: SendRawData(992 bytes)
2013-04-23 18:31:41,506 common.py 628 INFO: (216) (H030) SendRawData(00992 bytes)
2013-04-23 18:31:41,506 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,506 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 992 bytes TO BE SENT CHANNEL
(P0216) (H0030)
2013-04-23 18:31:41,506 common.py 782 DEBUG:

        Truncating 992 bytes
        9F 1D CB C3 5C 35 0D 60 27 F9 8B E0 F5 C8 B4 3B         ....\5.`'......;
```


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```
        ...
        57 1F 88 47 A7 37 B7 88 8E 95 E8 C0 C0 C6 18 C8         W..G.7..........
(sha256 df429981f95ceda810f7e93f8be0be390fe81ea2bbc2bc9664fa4baf5f4d92aa)


2013-04-23 18:31:41,506 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX Buffer holds 0 bytes
2013-04-23 18:31:41,506 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:41,506 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:41,523 common.py 1343 DEBUG:           <==(channel data) 76 NEW BYTES READ FROM CHANNEL
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54         .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65         F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43         sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                     K" /></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 18:31:41,523 common.py 1621 DEBUG:
==============================================================================
2013-04-23 18:31:41,523 common.py 1622 DEBUG:           <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 18:31:41,523 common.py 1623 DEBUG:
==============================================================================
2013-04-23 18:31:41,523 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 18:31:41,523 common.py 1625 DEBUG:
==============================================================================

2013-04-23 18:31:41,523 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:41,523 firehose.py 305 INFO: DIGEST TABLE ACCEPTED (992 HASHES) - Just RESET
common.CurrentDigestLocation to 0, since now using a new table
2013-04-23 18:31:41,523 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,523 firehose.py 1431 DEBUG: NumSectors is 784
2013-04-23 18:31:41,523 firehose.py 1442 DEBUG: 16 SectorsWritten and 768 NumSectors to go
2013-04-23 18:31:41,523 firehose.py 1405 DEBUG:
(217) (H000) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=768) (on the channel)
2013-04-23 18:31:41,523 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,523 common.py 628 INFO: (217) (H000) SendRawData(08192 bytes)
2013-04-23 18:31:41,523 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,523 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0217) (H0000)
2013-04-23 18:31:41,523 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,523 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,523 firehose.py 1431 DEBUG: NumSectors is 768
2013-04-23 18:31:41,523 firehose.py 1442 DEBUG: 16 SectorsWritten and 752 NumSectors to go
2013-04-23 18:31:41,523 firehose.py 1405 DEBUG:
(218) (H001) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=752) (on the channel)
2013-04-23 18:31:41,523 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,523 common.py 628 INFO: (218) (H001) SendRawData(08192 bytes)
2013-04-23 18:31:41,523 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,523 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0218) (H0001)
2013-04-23 18:31:41,523 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,523 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,523 firehose.py 1431 DEBUG: NumSectors is 752
```


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```
2013-04-23 18:31:41,523 firehose.py 1442 DEBUG: 16 SectorsWritten and 736 NumSectors to go
2013-04-23 18:31:41,523 firehose.py 1405 DEBUG:
(219) (H002) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=736) (on the channel)
2013-04-23 18:31:41,523 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,523 common.py 628 INFO: (219) (H002) SendRawData(08192 bytes)
2013-04-23 18:31:41,523 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,523 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0219) (H0002)
2013-04-23 18:31:41,523 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,523 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,523 firehose.py 1431 DEBUG: NumSectors is 736
2013-04-23 18:31:41,523 firehose.py 1442 DEBUG: 16 SectorsWritten and 720 NumSectors to go
2013-04-23 18:31:41,523 firehose.py 1405 DEBUG:
(220) (H003) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=720) (on the channel)
2013-04-23 18:31:41,523 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,523 common.py 628 INFO: (220) (H003) SendRawData(08192 bytes)
2013-04-23 18:31:41,523 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,523 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0220) (H0003)
2013-04-23 18:31:41,523 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,523 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,523 firehose.py 1431 DEBUG: NumSectors is 720
2013-04-23 18:31:41,523 firehose.py 1442 DEBUG: 16 SectorsWritten and 704 NumSectors to go
2013-04-23 18:31:41,523 firehose.py 1405 DEBUG:
(221) (H004) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=704) (on the channel)
2013-04-23 18:31:41,523 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,523 common.py 628 INFO: (221) (H004) SendRawData(08192 bytes)
2013-04-23 18:31:41,523 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,523 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0221) (H0004)
2013-04-23 18:31:41,523 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,523 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,523 firehose.py 1431 DEBUG: NumSectors is 704
2013-04-23 18:31:41,523 firehose.py 1442 DEBUG: 16 SectorsWritten and 688 NumSectors to go
2013-04-23 18:31:41,523 firehose.py 1405 DEBUG:
(222) (H005) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=688) (on the channel)
2013-04-23 18:31:41,523 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,523 common.py 628 INFO: (222) (H005) SendRawData(08192 bytes)
2013-04-23 18:31:41,523 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,523 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0222) (H0005)
2013-04-23 18:31:41,523 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,523 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,523 firehose.py 1431 DEBUG: NumSectors is 688
2013-04-23 18:31:41,523 firehose.py 1442 DEBUG: 16 SectorsWritten and 672 NumSectors to go
```


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```
2013-04-23 18:31:41,523 firehose.py 1405 DEBUG:
(223) (H006) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=672) (on the channel)
2013-04-23 18:31:41,523 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,523 common.py 628 INFO: (223) (H006) SendRawData(08192 bytes)
2013-04-23 18:31:41,523 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,523 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0223) (H0006)
2013-04-23 18:31:41,539 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,539 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,539 firehose.py 1431 DEBUG: NumSectors is 672
2013-04-23 18:31:41,539 firehose.py 1442 DEBUG: 16 SectorsWritten and 656 NumSectors to go
2013-04-23 18:31:41,539 firehose.py 1405 DEBUG:
(224) (H007) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=656) (on the channel)
2013-04-23 18:31:41,539 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,539 common.py 628 INFO: (224) (H007) SendRawData(08192 bytes)
2013-04-23 18:31:41,539 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,539 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0224) (H0007)
2013-04-23 18:31:41,539 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,539 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,539 firehose.py 1431 DEBUG: NumSectors is 656
2013-04-23 18:31:41,539 firehose.py 1442 DEBUG: 16 SectorsWritten and 640 NumSectors to go
2013-04-23 18:31:41,539 firehose.py 1405 DEBUG:
(225) (H008) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=640) (on the channel)
2013-04-23 18:31:41,539 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,539 common.py 628 INFO: (225) (H008) SendRawData(08192 bytes)
2013-04-23 18:31:41,539 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,539 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0225) (H0008)
2013-04-23 18:31:41,539 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,539 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,539 firehose.py 1431 DEBUG: NumSectors is 640
2013-04-23 18:31:41,539 firehose.py 1442 DEBUG: 16 SectorsWritten and 624 NumSectors to go
2013-04-23 18:31:41,539 firehose.py 1405 DEBUG:
(226) (H009) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=624) (on the channel)
2013-04-23 18:31:41,539 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,539 common.py 628 INFO: (226) (H009) SendRawData(08192 bytes)
2013-04-23 18:31:41,539 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,539 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0226) (H0009)
2013-04-23 18:31:41,539 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,539 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,539 firehose.py 1431 DEBUG: NumSectors is 624
2013-04-23 18:31:41,539 firehose.py 1442 DEBUG: 16 SectorsWritten and 608 NumSectors to go
2013-04-23 18:31:41,539 firehose.py 1405 DEBUG:
```


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```
(227) (H010) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=608) (on the channel)
2013-04-23 18:31:41,539 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,539 common.py 628 INFO: (227) (H010) SendRawData(08192 bytes)
2013-04-23 18:31:41,539 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,539 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0227) (H0010)
2013-04-23 18:31:41,539 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,539 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,539 firehose.py 1431 DEBUG: NumSectors is 608
2013-04-23 18:31:41,539 firehose.py 1442 DEBUG: 16 SectorsWritten and 592 NumSectors to go
2013-04-23 18:31:41,539 firehose.py 1405 DEBUG:
(228) (H011) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=592) (on the channel)
2013-04-23 18:31:41,539 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,539 common.py 628 INFO: (228) (H011) SendRawData(08192 bytes)
2013-04-23 18:31:41,539 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,539 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0228) (H0011)
2013-04-23 18:31:41,539 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,539 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,539 firehose.py 1431 DEBUG: NumSectors is 592
2013-04-23 18:31:41,539 firehose.py 1442 DEBUG: 16 SectorsWritten and 576 NumSectors to go
2013-04-23 18:31:41,539 firehose.py 1405 DEBUG:
(229) (H012) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=576) (on the channel)
2013-04-23 18:31:41,539 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,539 common.py 628 INFO: (229) (H012) SendRawData(08192 bytes)
2013-04-23 18:31:41,539 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,539 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0229) (H0012)
2013-04-23 18:31:41,539 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,539 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,539 firehose.py 1431 DEBUG: NumSectors is 576
2013-04-23 18:31:41,539 firehose.py 1442 DEBUG: 16 SectorsWritten and 560 NumSectors to go
2013-04-23 18:31:41,539 firehose.py 1405 DEBUG:
(230) (H013) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=560) (on the channel)
2013-04-23 18:31:41,539 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,553 common.py 628 INFO: (230) (H013) SendRawData(08192 bytes)
2013-04-23 18:31:41,553 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,553 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0230) (H0013)
2013-04-23 18:31:41,553 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,553 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,553 firehose.py 1431 DEBUG: NumSectors is 560
2013-04-23 18:31:41,553 firehose.py 1442 DEBUG: 16 SectorsWritten and 544 NumSectors to go
2013-04-23 18:31:41,553 firehose.py 1405 DEBUG:
(231) (H014) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=544) (on the channel)
```


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```
2013-04-23 18:31:41,553 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,553 common.py 628 INFO: (231) (H014) SendRawData(08192 bytes)
2013-04-23 18:31:41,553 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,553 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0231) (H0014)
2013-04-23 18:31:41,553 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,553 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,553 firehose.py 1431 DEBUG: NumSectors is 544
2013-04-23 18:31:41,553 firehose.py 1442 DEBUG: 16 SectorsWritten and 528 NumSectors to go
2013-04-23 18:31:41,553 firehose.py 1405 DEBUG:
(232) (H015) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=528) (on the channel)
2013-04-23 18:31:41,553 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,553 common.py 628 INFO: (232) (H015) SendRawData(08192 bytes)
2013-04-23 18:31:41,553 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,553 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0232) (H0015)
2013-04-23 18:31:41,553 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,553 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,553 firehose.py 1431 DEBUG: NumSectors is 528
2013-04-23 18:31:41,553 firehose.py 1442 DEBUG: 16 SectorsWritten and 512 NumSectors to go
2013-04-23 18:31:41,553 firehose.py 1405 DEBUG:
(233) (H016) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=512) (on the channel)
2013-04-23 18:31:41,553 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,553 common.py 628 INFO: (233) (H016) SendRawData(08192 bytes)
2013-04-23 18:31:41,553 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,553 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0233) (H0016)
2013-04-23 18:31:41,553 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,553 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,553 firehose.py 1431 DEBUG: NumSectors is 512
2013-04-23 18:31:41,553 firehose.py 1442 DEBUG: 16 SectorsWritten and 496 NumSectors to go
2013-04-23 18:31:41,553 firehose.py 1448 INFO: 87% (elapsed=0.0780)       2.50MBps (WRITE)
2013-04-23 18:31:41,553 firehose.py 1405 DEBUG:
(234) (H017) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=496) (on the channel)
2013-04-23 18:31:41,553 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,553 common.py 628 INFO: (234) (H017) SendRawData(08192 bytes)
2013-04-23 18:31:41,553 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,553 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0234) (H0017)
2013-04-23 18:31:41,553 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,553 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,553 firehose.py 1431 DEBUG: NumSectors is 496
2013-04-23 18:31:41,553 firehose.py 1442 DEBUG: 16 SectorsWritten and 480 NumSectors to go
2013-04-23 18:31:41,553 firehose.py 1405 DEBUG:
(235) (H018) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=480) (on the channel)
```


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```
2013-04-23 18:31:41,553 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,553 common.py 628 INFO: (235) (H018) SendRawData(08192 bytes)
2013-04-23 18:31:41,553 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,553 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0235) (H0018)
2013-04-23 18:31:41,553 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,553 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,553 firehose.py 1431 DEBUG: NumSectors is 480
2013-04-23 18:31:41,553 firehose.py 1442 DEBUG: 16 SectorsWritten and 464 NumSectors to go
2013-04-23 18:31:41,553 firehose.py 1405 DEBUG:
(236) (H019) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=464) (on the channel)
2013-04-23 18:31:41,553 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,553 common.py 628 INFO: (236) (H019) SendRawData(08192 bytes)
2013-04-23 18:31:41,553 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,553 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0236) (H0019)
2013-04-23 18:31:41,553 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,569 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,569 firehose.py 1431 DEBUG: NumSectors is 464
2013-04-23 18:31:41,569 firehose.py 1442 DEBUG: 16 SectorsWritten and 448 NumSectors to go
2013-04-23 18:31:41,569 firehose.py 1405 DEBUG:
(237) (H020) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=448) (on the channel)
2013-04-23 18:31:41,569 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,569 common.py 628 INFO: (237) (H020) SendRawData(08192 bytes)
2013-04-23 18:31:41,569 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,569 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0237) (H0020)
2013-04-23 18:31:41,569 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,569 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,569 firehose.py 1431 DEBUG: NumSectors is 448
2013-04-23 18:31:41,569 firehose.py 1442 DEBUG: 16 SectorsWritten and 432 NumSectors to go
2013-04-23 18:31:41,569 firehose.py 1405 DEBUG:
(238) (H021) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=432) (on the channel)
2013-04-23 18:31:41,569 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,569 common.py 628 INFO: (238) (H021) SendRawData(08192 bytes)
2013-04-23 18:31:41,569 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,569 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0238) (H0021)
2013-04-23 18:31:41,569 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,569 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,569 firehose.py 1431 DEBUG: NumSectors is 432
2013-04-23 18:31:41,569 firehose.py 1442 DEBUG: 16 SectorsWritten and 416 NumSectors to go
2013-04-23 18:31:41,569 firehose.py 1405 DEBUG:
(239) (H022) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=416) (on the channel)
2013-04-23 18:31:41,569 common.py 1859 DEBUG: SendRawData(8192 bytes)
```


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```
2013-04-23 18:31:41,569 common.py 628 INFO: (239) (H022) SendRawData(08192 bytes)
2013-04-23 18:31:41,569 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,569 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0239) (H0022)
2013-04-23 18:31:41,569 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,569 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,569 firehose.py 1431 DEBUG: NumSectors is 416
2013-04-23 18:31:41,569 firehose.py 1442 DEBUG: 16 SectorsWritten and 400 NumSectors to go
2013-04-23 18:31:41,569 firehose.py 1405 DEBUG:
(240) (H023) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=400) (on the channel)
2013-04-23 18:31:41,569 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,569 common.py 628 INFO: (240) (H023) SendRawData(08192 bytes)
2013-04-23 18:31:41,569 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,569 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0240) (H0023)
2013-04-23 18:31:41,569 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,569 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,569 firehose.py 1431 DEBUG: NumSectors is 400
2013-04-23 18:31:41,569 firehose.py 1442 DEBUG: 16 SectorsWritten and 384 NumSectors to go
2013-04-23 18:31:41,569 firehose.py 1405 DEBUG:
(241) (H024) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=384) (on the channel)
2013-04-23 18:31:41,569 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,569 common.py 628 INFO: (241) (H024) SendRawData(08192 bytes)
2013-04-23 18:31:41,569 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,569 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0241) (H0024)
2013-04-23 18:31:41,569 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,569 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,569 firehose.py 1431 DEBUG: NumSectors is 384
2013-04-23 18:31:41,569 firehose.py 1442 DEBUG: 16 SectorsWritten and 368 NumSectors to go
2013-04-23 18:31:41,569 firehose.py 1405 DEBUG:
(242) (H025) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=368) (on the channel)
2013-04-23 18:31:41,569 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,569 common.py 628 INFO: (242) (H025) SendRawData(08192 bytes)
2013-04-23 18:31:41,569 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,569 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0242) (H0025)
2013-04-23 18:31:41,569 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,569 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,569 firehose.py 1431 DEBUG: NumSectors is 368
2013-04-23 18:31:41,569 firehose.py 1442 DEBUG: 16 SectorsWritten and 352 NumSectors to go
2013-04-23 18:31:41,569 firehose.py 1405 DEBUG:
(243) (H026) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=352) (on the channel)
2013-04-23 18:31:41,569 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,569 common.py 628 INFO: (243) (H026) SendRawData(08192 bytes)
```


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```
2013-04-23 18:31:41,569 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,569 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0243) (H0026)
2013-04-23 18:31:41,569 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,585 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,585 firehose.py 1431 DEBUG: NumSectors is 352
2013-04-23 18:31:41,585 firehose.py 1442 DEBUG: 16 SectorsWritten and 336 NumSectors to go
2013-04-23 18:31:41,585 firehose.py 1405 DEBUG:
(244) (H027) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=336) (on the channel)
2013-04-23 18:31:41,585 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,585 common.py 628 INFO: (244) (H027) SendRawData(08192 bytes)
2013-04-23 18:31:41,585 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,585 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0244) (H0027)
2013-04-23 18:31:41,585 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,585 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,585 firehose.py 1431 DEBUG: NumSectors is 336
2013-04-23 18:31:41,585 firehose.py 1442 DEBUG: 16 SectorsWritten and 320 NumSectors to go
2013-04-23 18:31:41,585 firehose.py 1405 DEBUG:
(245) (H028) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=320) (on the channel)
2013-04-23 18:31:41,585 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,585 common.py 628 INFO: (245) (H028) SendRawData(08192 bytes)
2013-04-23 18:31:41,585 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,585 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0245) (H0028)
2013-04-23 18:31:41,585 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,585 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,585 firehose.py 1431 DEBUG: NumSectors is 320
2013-04-23 18:31:41,585 firehose.py 1442 DEBUG: 16 SectorsWritten and 304 NumSectors to go
2013-04-23 18:31:41,585 firehose.py 1405 DEBUG:
(246) (H029) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=304) (on the channel)
2013-04-23 18:31:41,585 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,585 common.py 628 INFO: (246) (H029) SendRawData(08192 bytes)
2013-04-23 18:31:41,585 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,585 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0246) (H0029)
2013-04-23 18:31:41,585 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,585 firehose.py 189 INFO:     _                 _       _       _     _
2013-04-23 18:31:41,585 firehose.py 190 INFO:   | |               | |     | |     | |   | |
2013-04-23 18:31:41,585 firehose.py 191 INFO:   | |__   __ _ ___| |__   | |_ __ _| |__ | | ___
2013-04-23 18:31:41,585 firehose.py 192 INFO:   | '_ \ / _` / __| '_ \  | __/ _` | '_ \| |/ _ \
2013-04-23 18:31:41,585 firehose.py 193 INFO:   | | | | (_| \__ \ | | | | || (_| | |_) | |  __/
2013-04-23 18:31:41,585 firehose.py 194 INFO:   | | | |\  , |   / | | |  \  \  , | .  /| |\   |
2013-04-23 18:31:41,585 firehose.py 196 INFO: FIREHOSE: Since common.CurrentDigestLocation=30, Need to send
digest table here digest_file_offset=6944
```


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```
2013-04-23 18:31:41,585 firehose.py 197 INFO: FIREHOSE: Sending DIGEST TABLE 7 (zero based array)
2013-04-23 18:31:41,585 common.py 2059 INFO:

        Looking for 'ChainedTableOfDigests.bin'  <--- LOOKING FOR THIS FILE

2013-04-23 18:31:41,585 common.py 2064 INFO:
        **Found D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin (7.41 KB) (15 sectors)

2013-04-23 18:31:41,585 firehose.py 229 DEBUG: Filename: 'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
(7.41 KB)
2013-04-23 18:31:41,585 firehose.py 241 INFO: FileSizeInSectors 15
2013-04-23 18:31:41,585 firehose.py 242 INFO: digest file offset 6944
2013-04-23 18:31:41,585 firehose.py 243 INFO: num file sectors 2
2013-04-23 18:31:41,585 firehose.py 244 INFO: start_sector 0
2013-04-23 18:31:41,601 firehose.py 245 INFO: PayloadSize is 1 sectors (992 bytes)
2013-04-23 18:31:41,601 firehose.py 249 INFO: CHANGED num_file_sectors is 1
2013-04-23 18:31:41,601 firehose.py 262 INFO: DIGEST_TABLE seeking to byte location 6944
2013-04-23 18:31:41,601 firehose.py 272 INFO: NOTE: PayloadSize is 992
2013-04-23 18:31:41,601 firehose.py 278 DEBUG: NOTE: Trying to read 992 bytes from
'D:\Dropbox\zenos_paradox\ChainedTableOfDigests.bin'
2013-04-23 18:31:41,601 common.py 1859 DEBUG: SendRawData(640 bytes)
2013-04-23 18:31:41,601 common.py 628 INFO: (247) (H030) SendRawData(00640 bytes)
2013-04-23 18:31:41,601 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,601 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 640 bytes TO BE SENT CHANNEL
(P0247) (H0030)
2013-04-23 18:31:41,601 common.py 782 DEBUG:

        Truncating 640 bytes
        9F 1D CB C3 5C 35 0D 60 27 F9 8B E0 F5 C8 B4 3B         ....\5.`'......;
        ...
        5E A7 57 C7 57 1F 3A F6 69 23 6B 6C 5E 0C E8 C0         ^.W.W.:.i#kl^...
(sha256 6fdeaee10f43a9e460f214ac9706a374571f8847a737b7888e95e8c0c0c618c8)


2013-04-23 18:31:41,601 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 18:31:41,601 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:41,601 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:41,617 common.py 1343 DEBUG:          <==(channel data) 76 NEW BYTES READ FROM CHANNEL
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54         .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65         F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43         sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                     K" /></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 18:31:41,617 common.py 1621 DEBUG:
==============================================================================
2013-04-23 18:31:41,617 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX Buffer still holds 0 bytes:
2013-04-23 18:31:41,617 common.py 1623 DEBUG:
==============================================================================
2013-04-23 18:31:41,617 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 18:31:41,617 common.py 1625 DEBUG:
==============================================================================

2013-04-23 18:31:41,617 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:41,617 firehose.py 305 INFO: DIGEST TABLE ACCEPTED (640 HASHES) - Just RESET
common.CurrentDigestLocation to 0, since now using a new table
2013-04-23 18:31:41,617 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,617 firehose.py 1431 DEBUG: NumSectors is 304
2013-04-23 18:31:41,617 firehose.py 1442 DEBUG: 16 SectorsWritten and 288 NumSectors to go
2013-04-23 18:31:41,617 firehose.py 1405 DEBUG:
(248) (H000) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=288) (on the channel)
2013-04-23 18:31:41,617 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,617 common.py 628 INFO: (248) (H000) SendRawData(08192 bytes)
2013-04-23 18:31:41,617 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,617 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0248) (H0000)
2013-04-23 18:31:41,617 common.py 782 DEBUG:
```


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```
        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,617 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,617 firehose.py 1431 DEBUG: NumSectors is 288
2013-04-23 18:31:41,617 firehose.py 1442 DEBUG: 16 SectorsWritten and 272 NumSectors to go
2013-04-23 18:31:41,617 firehose.py 1405 DEBUG:
(249) (H001) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=272) (on the channel)
2013-04-23 18:31:41,617 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,617 common.py 628 INFO: (249) (H001) SendRawData(08192 bytes)
2013-04-23 18:31:41,617 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,617 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0249) (H0001)
2013-04-23 18:31:41,617 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,617 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,617 firehose.py 1431 DEBUG: NumSectors is 272
2013-04-23 18:31:41,617 firehose.py 1442 DEBUG: 16 SectorsWritten and 256 NumSectors to go
2013-04-23 18:31:41,617 firehose.py 1405 DEBUG:
(250) (H002) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=256) (on the channel)
2013-04-23 18:31:41,617 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,617 common.py 628 INFO: (250) (H002) SendRawData(08192 bytes)
2013-04-23 18:31:41,617 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,617 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0250) (H0002)
2013-04-23 18:31:41,617 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,617 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,617 firehose.py 1431 DEBUG: NumSectors is 256
2013-04-23 18:31:41,617 firehose.py 1442 DEBUG: 16 SectorsWritten and 240 NumSectors to go
2013-04-23 18:31:41,617 firehose.py 1405 DEBUG:
(251) (H003) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=240) (on the channel)
2013-04-23 18:31:41,617 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,617 common.py 628 INFO: (251) (H003) SendRawData(08192 bytes)
2013-04-23 18:31:41,617 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,617 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0251) (H0003)
2013-04-23 18:31:41,617 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,617 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,617 firehose.py 1431 DEBUG: NumSectors is 240
2013-04-23 18:31:41,617 firehose.py 1442 DEBUG: 16 SectorsWritten and 224 NumSectors to go
2013-04-23 18:31:41,617 firehose.py 1405 DEBUG:
(252) (H004) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=224) (on the channel)
2013-04-23 18:31:41,617 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,617 common.py 628 INFO: (252) (H004) SendRawData(08192 bytes)
2013-04-23 18:31:41,617 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,617 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0252) (H0004)
2013-04-23 18:31:41,617 common.py 782 DEBUG:
```


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```
        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,617 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,617 firehose.py 1431 DEBUG: NumSectors is 224
2013-04-23 18:31:41,617 firehose.py 1442 DEBUG: 16 SectorsWritten and 208 NumSectors to go
2013-04-23 18:31:41,617 firehose.py 1405 DEBUG:
(253) (H005) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=208) (on the channel)
2013-04-23 18:31:41,617 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,617 common.py 628 INFO: (253) (H005) SendRawData(08192 bytes)
2013-04-23 18:31:41,617 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,617 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0253) (H0005)
2013-04-23 18:31:41,617 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,617 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,617 firehose.py 1431 DEBUG: NumSectors is 208
2013-04-23 18:31:41,617 firehose.py 1442 DEBUG: 16 SectorsWritten and 192 NumSectors to go
2013-04-23 18:31:41,617 firehose.py 1405 DEBUG:
(254) (H006) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=192) (on the channel)
2013-04-23 18:31:41,617 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,617 common.py 628 INFO: (254) (H006) SendRawData(08192 bytes)
2013-04-23 18:31:41,617 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,617 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0254) (H0006)
2013-04-23 18:31:41,631 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,631 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,631 firehose.py 1431 DEBUG: NumSectors is 192
2013-04-23 18:31:41,631 firehose.py 1442 DEBUG: 16 SectorsWritten and 176 NumSectors to go
2013-04-23 18:31:41,631 firehose.py 1405 DEBUG:
(255) (H007) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=176) (on the channel)
2013-04-23 18:31:41,631 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,631 common.py 628 INFO: (255) (H007) SendRawData(08192 bytes)
2013-04-23 18:31:41,631 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,631 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0255) (H0007)
2013-04-23 18:31:41,631 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,631 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,631 firehose.py 1431 DEBUG: NumSectors is 176
2013-04-23 18:31:41,631 firehose.py 1442 DEBUG: 16 SectorsWritten and 160 NumSectors to go
2013-04-23 18:31:41,631 firehose.py 1405 DEBUG:
(256) (H008) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=160) (on the channel)
2013-04-23 18:31:41,631 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,631 common.py 628 INFO: (256) (H008) SendRawData(08192 bytes)
2013-04-23 18:31:41,631 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,631 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0256) (H0008)
2013-04-23 18:31:41,631 common.py 782 DEBUG:

        Truncating 8192 bytes
```


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```
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,631 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,631 firehose.py 1431 DEBUG: NumSectors is 160
2013-04-23 18:31:41,631 firehose.py 1442 DEBUG: 16 SectorsWritten and 144 NumSectors to go
2013-04-23 18:31:41,631 firehose.py 1405 DEBUG:
(257) (H009) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=144) (on the channel)
2013-04-23 18:31:41,631 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,631 common.py 628 INFO: (257) (H009) SendRawData(08192 bytes)
2013-04-23 18:31:41,631 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,631 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0257) (H0009)
2013-04-23 18:31:41,631 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,631 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,631 firehose.py 1431 DEBUG: NumSectors is 144
2013-04-23 18:31:41,631 firehose.py 1442 DEBUG: 16 SectorsWritten and 128 NumSectors to go
2013-04-23 18:31:41,631 firehose.py 1405 DEBUG:
(258) (H010) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=128) (on the channel)
2013-04-23 18:31:41,631 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,631 common.py 628 INFO: (258) (H010) SendRawData(08192 bytes)
2013-04-23 18:31:41,631 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,631 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0258) (H0010)
2013-04-23 18:31:41,631 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,631 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,631 firehose.py 1431 DEBUG: NumSectors is 128
2013-04-23 18:31:41,631 firehose.py 1442 DEBUG: 16 SectorsWritten and 112 NumSectors to go
2013-04-23 18:31:41,631 firehose.py 1405 DEBUG:
(259) (H011) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=112) (on the channel)
2013-04-23 18:31:41,631 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,631 common.py 628 INFO: (259) (H011) SendRawData(08192 bytes)
2013-04-23 18:31:41,631 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,631 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0259) (H0011)
2013-04-23 18:31:41,631 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,631 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,631 firehose.py 1431 DEBUG: NumSectors is 112
2013-04-23 18:31:41,631 firehose.py 1442 DEBUG: 16 SectorsWritten and 96 NumSectors to go
2013-04-23 18:31:41,631 firehose.py 1448 INFO: 97% (elapsed=0.0780)       2.50MBps (WRITE)
2013-04-23 18:31:41,631 firehose.py 1405 DEBUG:
(260) (H012) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=96) (on the channel)
2013-04-23 18:31:41,631 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,631 common.py 628 INFO: (260) (H012) SendRawData(08192 bytes)
2013-04-23 18:31:41,631 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,631 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0260) (H0012)
2013-04-23 18:31:41,631 common.py 782 DEBUG:

        Truncating 8192 bytes
```


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```
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,631 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,631 firehose.py 1431 DEBUG: NumSectors is 96
2013-04-23 18:31:41,631 firehose.py 1442 DEBUG: 16 SectorsWritten and 80 NumSectors to go
2013-04-23 18:31:41,631 firehose.py 1405 DEBUG:
(261) (H013) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=80) (on the channel)
2013-04-23 18:31:41,631 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,631 common.py 628 INFO: (261) (H013) SendRawData(08192 bytes)
2013-04-23 18:31:41,648 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,648 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0261) (H0013)
2013-04-23 18:31:41,648 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,648 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,648 firehose.py 1431 DEBUG: NumSectors is 80
2013-04-23 18:31:41,648 firehose.py 1442 DEBUG: 16 SectorsWritten and 64 NumSectors to go
2013-04-23 18:31:41,648 firehose.py 1405 DEBUG:
(262) (H014) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=64) (on the channel)
2013-04-23 18:31:41,648 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,648 common.py 628 INFO: (262) (H014) SendRawData(08192 bytes)
2013-04-23 18:31:41,648 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,648 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0262) (H0014)
2013-04-23 18:31:41,648 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,648 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,648 firehose.py 1431 DEBUG: NumSectors is 64
2013-04-23 18:31:41,648 firehose.py 1442 DEBUG: 16 SectorsWritten and 48 NumSectors to go
2013-04-23 18:31:41,648 firehose.py 1405 DEBUG:
(263) (H015) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=48) (on the channel)
2013-04-23 18:31:41,648 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,648 common.py 628 INFO: (263) (H015) SendRawData(08192 bytes)
2013-04-23 18:31:41,648 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,648 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0263) (H0015)
2013-04-23 18:31:41,648 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,648 firehose.py 1430 DEBUG: Length of str_data is 8192
2013-04-23 18:31:41,648 firehose.py 1431 DEBUG: NumSectors is 48
2013-04-23 18:31:41,648 firehose.py 1442 DEBUG: 16 SectorsWritten and 32 NumSectors to go
2013-04-23 18:31:41,648 firehose.py 1405 DEBUG:
(264) (H016) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=32) (on the channel)
2013-04-23 18:31:41,648 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,648 common.py 628 INFO: (264) (H016) SendRawData(08192 bytes)
2013-04-23 18:31:41,648 common.py 766 DEBUG:
******************************************************************************
2013-04-23 18:31:41,648 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0264) (H0016)
2013-04-23 18:31:41,648 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
```


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```
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,648 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,648 firehose.py 1431 DEBUG: NumSectors is 32
2013-04-23 18:31:41,648 firehose.py 1442 DEBUG: 16 SectorsWritten and 16 NumSectors to go
2013-04-23 18:31:41,648 firehose.py 1405 DEBUG:
(265) (H017) FIREHOSE: SendRawData(8192 bytes, NumSectors Remaining=16) (on the channel)
2013-04-23 18:31:41,648 common.py 1859 DEBUG: SendRawData(8192 bytes)
2013-04-23 18:31:41,648 common.py 628 INFO: (265) (H017) SendRawData(08192 bytes)
2013-04-23 18:31:41,648 common.py 766 DEBUG:
*******************************************************************************
2013-04-23 18:31:41,648 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 8192 bytes TO BE SENT CHANNEL
(P0265) (H0017)
2013-04-23 18:31:41,648 common.py 782 DEBUG:

        Truncating 8192 bytes
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
        ...
        00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00         ................
(sha256 9f1dcbc35c350d6027f98be0f5c8b43b42ca52b7604459c0c42be3aa88913d47)


2013-04-23 18:31:41,648 firehose.py 1430 DEBUG: Length of str data is 8192
2013-04-23 18:31:41,648 firehose.py 1431 DEBUG: NumSectors is 16
2013-04-23 18:31:41,648 firehose.py 1442 DEBUG: 16 SectorsWritten and 0 NumSectors to go
2013-04-23 18:31:41,648 firehose.py 1461 INFO: COMPLETE: Elapsed Time: 0.78000 (2625.6411KBps) [2.5641MBps]

2013-04-23 18:31:41,648 firehose.py 1247 INFO: DONE sending 'D:\Dropbox\zenos_paradox\dummy.bin' as RAW Data,
        looking for ACK to see if it was received correctly!
2013-04-23 18:31:41,648 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 18:31:41,648 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:41,648 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:41,663 common.py 1343 DEBUG:         <==(channel data) 181 NEW BYTES READ FROM CHANNEL
        Truncating 181 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31         <?xml version="1
        ...
        66 61 6C 73 65 22 20 2F 3E 3C 2F 64 61 74 61 3E         false" /></data>
(sha256 254c52fd9878f3d04a67a62f8c7e20c7e063e6e25d5b9316da18af23e95ee741)


2013-04-23 18:31:41,663 common.py 1621 DEBUG:
===============================================================================
2013-04-23 18:31:41,663 common.py 1622 DEBUG:         <--(channel data) TARGET TO HOST (showing 89 bytes) -
RX_Buffer still holds 92 bytes:
2013-04-23 18:31:41,663 common.py 1623 DEBUG:
===============================================================================
2013-04-23 18:31:41,663 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Finished address 4096" />
</data>


2013-04-23 18:31:41,663 common.py 1625 DEBUG:
===============================================================================

2013-04-23 18:31:41,663 common.py 1632 INFO: FIREHOSE LOG: Finished address 4096
2013-04-23 18:31:41,663 common.py 1621 DEBUG:
===============================================================================
2013-04-23 18:31:41,663 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 92 bytes) -
RX Buffer still holds 0 bytes:
2013-04-23 18:31:41,663 common.py 1623 DEBUG:
===============================================================================
2013-04-23 18:31:41,663 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" rawmode="false" />
</data>


2013-04-23 18:31:41,663 common.py 1625 DEBUG:
===============================================================================

2013-04-23 18:31:41,663 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:41,663 firehose.py 1271 INFO:
```


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```
FIREHOSE: Target wrote 'D:\Dropbox\zenos_paradox\dummy.bin' successfully
2013-04-23 18:31:41,663 firehose.py 714 INFO:
(266) (H018) FIREHOSE: Sending SetBootableStorageDrive
2013-04-23 18:31:41,663 common.py 1846 DEBUG: SendString(76 bytes)
2013-04-23 18:31:41,663 common.py 1847 DEBUG:
*****************************************************************************

<?xml version="1.0" ?>
<data>
<setbootablestoragedrive value="0" />
</data>

2013-04-23 18:31:41,663 common.py 1848 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,663 common.py 628 INFO: (266) (H018) SendString (00076 bytes)  <setbootablestoragedrive
2013-04-23 18:31:41,663 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,663 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 76 bytes TO BE SENT CHANNEL
(P0266) (H0018)
2013-04-23 18:31:41,663 common.py 782 DEBUG:

        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31        <?xml version="1
        2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 73        .0" ?>.<data>.<s
        65 74 62 6F 6F 74 61 62 6C 65 73 74 6F 72 61 67        etbootablestorag
        65 64 72 69 76 65 20 76 61 6C 75 65 3D 22 30 22        edrive value="0"
        20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A                     />.</data>.
(sha256 4312df6c048066938cbb38aa69dac897a42e26d6e41adf118a2466e94fc163ae)


2013-04-23 18:31:41,663 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 18:31:41,663 common.py 1583 DEBUG: FIREHOSE: RX Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:41,663 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:41,678 common.py 1343 DEBUG:          <==(channel data) 168 NEW BYTES READ FROM CHANNEL
        Truncating 168 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31        <?xml version="1
        ...
        3D 22 41 43 4B 22 20 2F 3E 3C 2F 64 61 74 61 3E        ="ACK" /></data>
(sha256 92ee940e4e7892b00123b1b03ef8acedc38618020ba84d112dbc66f03c238b1d)


2013-04-23 18:31:41,678 common.py 1621 DEBUG:
===========================================================================
2013-04-23 18:31:41,678 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 92 bytes) -
RX_Buffer still holds 76 bytes:
2013-04-23 18:31:41,678 common.py 1623 DEBUG:
===========================================================================
2013-04-23 18:31:41,678 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<log value="Set bootable drive to 0." />
</data>


2013-04-23 18:31:41,678 common.py 1625 DEBUG:
===========================================================================

2013-04-23 18:31:41,678 common.py 1632 INFO: FIREHOSE LOG: Set bootable drive to 0.
2013-04-23 18:31:41,678 common.py 1621 DEBUG:
===========================================================================
2013-04-23 18:31:41,678 common.py 1622 DEBUG:          <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 18:31:41,678 common.py 1623 DEBUG:
===========================================================================
2013-04-23 18:31:41,678 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 18:31:41,678 common.py 1625 DEBUG:
===========================================================================

2013-04-23 18:31:41,678 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:41,678 firehose.py 734 INFO: Got the ACK, Bootable Storage Drive set successfully
2013-04-23 18:31:41,678 firehose.py 519 INFO:
(267) (H019) FIREHOSE: Sending Reset
```


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```
2013-04-23 18:31:41,678 common.py 1846 DEBUG: SendString(62 bytes)
2013-04-23 18:31:41,678 common.py 1847 DEBUG:
*****************************************************************************

<?xml version="1.0" ?>
<data>
<power value="reset" />
</data>

2013-04-23 18:31:41,678 common.py 1848 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,678 common.py 628 INFO: (267) (H019) SendString (00062 bytes)  <power value="reset" /> <
2013-04-23 18:31:41,678 common.py 766 DEBUG:
*****************************************************************************
2013-04-23 18:31:41,678 common.py 767 DEBUG:    (channel data)--> HOST TO TARGET: 62 bytes TO BE SENT CHANNEL
(P0267) (H0019)
2013-04-23 18:31:41,678 common.py 782 DEBUG:

        Showing 62 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31        <?xml version="1
        2E 30 22 20 3F 3E 0A 3C 64 61 74 61 3E 0A 3C 70        .0" ?>.<data>.<p
        6F 77 65 72 20 76 61 6C 75 65 3D 22 72 65 73 65        ower value="rese
        74 22 20 2F 3E 0A 3C 2F 64 61 74 61 3E 0A              t" />.</data>.
(sha256 cfbcefe68ef764dfc1ba5c334389826d5ea757c7571f3af669236b6c5e0ce8c0)


2013-04-23 18:31:41,678 common.py 1577 DEBUG: FIREHOSE: In GetNextXML() RX_Buffer holds 0 bytes
2013-04-23 18:31:41,678 common.py 1583 DEBUG: FIREHOSE: RX_Buffer holds 0 bytes (need at least 44 bytes),
calling ReadCOMPort()
2013-04-23 18:31:41,678 common.py 1318 DEBUG: ReadCOMPort() Attempting to read 1024 bytes
2013-04-23 18:31:41,694 common.py 1343 DEBUG:            <==(channel data) 76 NEW BYTES READ FROM CHANNEL
        Showing 76 bytes
        3C 3F 78 6D 6C 20 76 65 72 73 69 6F 6E 3D 22 31        <?xml version="1
        2E 30 22 20 65 6E 63 6F 64 69 6E 67 3D 22 55 54        .0" encoding="UT
        46 2D 38 22 20 3F 3E 3C 64 61 74 61 3E 3C 72 65        F-8" ?><data><re
        73 70 6F 6E 73 65 20 76 61 6C 75 65 3D 22 41 43        sponse value="AC
        4B 22 20 2F 3E 3C 2F 64 61 74 61 3E                    K" /></data>
(sha256 f0b9fa67ce717e7cff98d591b068e76b714268b371ffab86514ca695312af317)


2013-04-23 18:31:41,694 common.py 1621 DEBUG:
===========================================================================
2013-04-23 18:31:41,694 common.py 1622 DEBUG:            <--(channel data) TARGET TO HOST (showing 76 bytes) -
RX_Buffer still holds 0 bytes:
2013-04-23 18:31:41,694 common.py 1623 DEBUG:
===========================================================================
2013-04-23 18:31:41,694 common.py 1624 DEBUG:

<?xml version="1.0" encoding="UTF-8" ?>
<data>
<response value="ACK" />
</data>


2013-04-23 18:31:41,694 common.py 1625 DEBUG:
===========================================================================

2013-04-23 18:31:41,694 common.py 1476 DEBUG: FIREHOSE: GetAttrib("value")=ACK
2013-04-23 18:31:41,694 firehose.py 147 INFO:
2013-04-23 18:31:41,694 firehose.py 148 INFO:     | |
2013-04-23 18:31:41,694 firehose.py 149 INFO:   __| | ___   _ __   ___
2013-04-23 18:31:41,694 firehose.py 150 INFO:  / _` |/ _ \| '_ \ / _ \
2013-04-23 18:31:41,694 firehose.py 151 INFO: | (_| | (_) | | | |  __/
2013-04-23 18:31:41,694 firehose.py 152 INFO:  \__,_|\___/|_| |_|\___|
2013-04-23 18:31:41,694 firehose.py 154 INFO: All Finished Successfully
2013-04-23 18:31:41,694 firehose.py 155 INFO: All Finished Successfully
2013-04-23 18:31:41,694 firehose.py 156 INFO: All Finished Successfully
2013-04-23 18:31:41,851 common.py 975 DEBUG: device_close() Port closed successfully
```


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