



Echo360 Capture API

Version 3.0.2
Reference Guide

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1 Introduction

This document covers the Capture API supported by the Echo360 active learning platform.

The Capture API is a set of RESTful API calls that are used to communicate with a client device, including a SafeCapture HD device, an Echo360 PRO, an Echo360 POD, a Classroom Capture installation or a Universal Capture installation. This communication is used to control or view device operations, and includes the ability to look at system status, retrieve diagnostics, schedule and control captures, among other tasks.

Besides a System Administrator generating calls manually, this API is called by 3 main system 'users':

- **The Ad Hoc Web Interface:** The Ad Hoc Web UI (also called the Device Web UI) is used by a human instructor to log in and perform an ad hoc capture. The ad hoc interface uses the Capture API to talk to the capture appliance and perform the actions indicated by the instructor through the interface, such as to start a capture when the instructor clicks Start Capture.
- **Room Control Systems:** Room control systems such as Crestron, AMX, and Extron use the Capture API to control the capture device so that the AMX room control panel used by the instructor can display a Capture button, show the next upcoming capture, etc.
- **Classroom Capture or Universal Capture Installation:** When the Classroom Capture or Universal Capture product is installed in on a classroom PC, the application uses the Capture API to get all of the status information shown in the interface, as well as to control the capture through the interface, as initiated by the instructor when applicable (start, pause, stop, or extend a capture).

2 The Basics

Each API call identified in this guide is listed with a title that identifies its function along with a brief description of what the call does. In addition, each call is listed with the following items, designed to show how the call is structured and how to use it.

Call – Shows whether the call is a GET or a POST call, and identifies the structure of the call.

- **GET** – Call is made using the HTTP 1.1. GET method. Often, GET calls are used to obtain specifics that can then be used in other calls.
- **POST** – Call is made using the HTTP 1.1 POST method. A “POST” call is usually used to create an object or make some change via the API. For example, the call to create a new capture is a POST call, as is the call to generate a Ping to test network connectivity. POST requests usually require POST data be appended to the request.

{base-uri} – A placeholder that represents the DNS Hostname or IP address of the device. Best practice is to include the port number along with the Hostname/IP address. For example: *https://10.3.11.24:8443*.

Request Data – Where applicable, identifies the data parameters that must be included in the call and provides a brief description of each.

Example: Shows a populated example of the API call that has been tested.

Response XML: Where possible, the full XML response of the provided Example call is provided as an example of the information returned by a device.

NOTE: Where feasible, the Response XML is provided in the main document along with the call that generated it. If the Response XML is much longer than a single page, it is provided in [Appendix: Response XML Examples](#). Where this is the case, a link is provided to the corresponding response in the Appendix, and the response in the Appendix provides a link back to the call in the main document. This is done for ease of navigation and reference.

In addition to the basic API call items listed above, each call is listed with a **CURL Example**, for users using the curl command line tool for calls. The basic syntax of a CURL call is:

```
curl --user $adminlogincreds --insecure -data --url  
$apiurl/capture/extend
```

Where:

- **\$adminlogincreds** provide the username:password combination needed to authorize the user making the call.
- **\$apiurl** identifies the IP address (and protocol if possible) of the device.
- **--data** precedes the POST data being included with the call, if applicable. These are the parameters defined in the URL encoded payload to be sent through the API. The set of data parameters is typically surrounded by single quotes, to exempt any special characters that may be present in the parameter data.

A fully populated example of a GET method CURL call that does not require request parameters:

```
curl --user admin:password --insecure --url  
https://192.168.61.10:8443/status/system
```

A fully populated example of a POST method CURL call that does require request parameters:

```
curl --user admin:password --insecure --data  
'duration=300&capture_profile_name=Display/Video  
(Podcast/Vodcast/EchoPlayer). Optimized for quality/full motion  
video&description=test-description' --url  
https://192.168.61.10:8443/capture/new_capture
```

As a final note on this Capture API guide, most of the calls provided in this document can be performed by any user. All of the calls listed in the Status API Calls and Capture API Calls sections of this guide can be performed by any user with login access to the system.

The calls in the Diagnostics API Calls section of this document can only be performed by an Administrator.

3 Appliance API Calls

3.1 Device and Capture Status API Calls

The Status API calls are used to return status and capture information for the device. The Status calls in this section are GET only, and are used specifically to retrieve information.

3.1.1 Get System Status

Returns the current status of the device.

Call: GET {base-uri}/status/system

Example: https://10.3.11.24:8443/status/system

CURL Example: curl --user admin:password --insecure --url https://192.168.61.10:8443/status/system

The Response XML includes the information outlined in the below table. An example is provided below the table.

Device Tags	
wall-clock-time	GMT Time string from the device
api-versions	API Version number of the client being communicated with. The current Capture API is version 3.0.
capture-profiles	The capture profiles able to be captured by the device. These are descriptive text strings that can be used in calls that require capture profile information, such as Create New Capture . Capture Profiles appear in the WebUI as a dropdown box for the user to select what type of adhoc capture to run.
monitor-profiles	The capture inputs that can be provided for device monitoring.
host-address	Name of the host.
serial-number	The MAC address of the device (a unique identifier).
system-version	Version string of the client software on the device.
up-since	GMT Date/Time when the system was last started.
last-sync	GMT Date/Time when the system last contacted the system.
Content Tags	
state	State of the current transfer: active, idle, or error.
archive-space-usage	Percentage of the allocated space on the device currently being used for saved data.
uploaded	Number of items that have been uploaded since the "up-since" time noted in the Device tags above.

uploads-pending	Number of items waiting to be uploaded from the device to the cloud.
bytes-pending	Number of bytes of data waiting to be uploaded from the device to the cloud.
uploading	Is either true or false. If true , the upload block is populated with the tags described immediately below. If false , the below tags do not appear.
upload/bytes-per-second	Bytes per second of the current file transfer.
upload/filename	Filename of the file currently being uploaded.
upload/start-time	GMT start time of the current file upload.
Log Tags	
utc-offset	Returns the offset in seconds between the time zone of current time and the UTC.
location	String identifying the room to which the device has been assigned on the active learning platform.

Response XML:

```

<status>
  <wall-clock-time>2014-02-12T14:21:29.550Z</wall-clock-time>
  <api-versions>
    <api-version>3.0</api-version>
  </api-versions>
  <capture-profiles>
<capture-profile>Audio Only (Podcast). Balanced between file size
&#038; quality</capture-profile>
<capture-profile>Display Only (Podcast/Vodcast/EchoPlayer).
Balanced between file size &#038; quality</capture-profile>
<capture-profile>Display/Video (Podcast/Vodcast/EchoPlayer).
Balanced between file size &#038; quality</capture-profile>
<capture-profile>Display/Video (Podcast/Vodcast/EchoPlayer).
Optimized for quality/full motion video</capture-profile>
<capture-profile>Dual Display (Podcast/Vodcast/EchoPlayer).
Optimized for file size &#038; bandwidth</capture-profile>
<capture-profile>Dual Video (Podcast/Vodcast/EchoPlayer) - Balance
between file size &#038; quality</capture-profile>
<capture-profile>Dual Video (Podcast/Vodcast/EchoPlayer) - High
Quality</capture-profile>
<capture-profile>Video Only (Podcast/Vodcast/EchoPlayer). Balanced
between file size &#038; quality</capture-profile>

```

```

</capture-profiles>
<monitor-profiles>
<monitor-profile>Display/Video (Podcast/Vodcast/EchoPlayer).
Balanced between file size &#038; quality</monitor-profile>
</monitor-profiles>
<host-address>echo001404</host-address>
<serial-number>00-1c-08-00-14-04</serial-number>
<system-version>5.4.39512</system-version>
<up-since>2014-02-09T06:33:09.212Z</up-since>
<last-sync>2014-02-12T14:21:08.066Z</last-sync>
<content>
<state>idle</state>
<archive-space-usage />
<uploaded>0</uploaded>
<uploads-pending>0</uploads-pending>
<bytes-pending>0</bytes-pending>
<uploading>>false</uploading>
</content>
<log>
<state>idle</state>
<archive-space-usage>37.8</archive-space-usage>
<uploaded>956</uploaded>
<uploads-pending>0</uploads-pending>
<bytes-pending>0</bytes-pending>
<uploading>>false</uploading>
</log>
<location>Dulles: Atlantic Blvd, Appliance Dev Miki's
SCHD</location>
<utc-offset>-300</utc-offset>
</status>

```

3.1.2 Get Capture Status

Returns information on the status of both the next and the current capture.

Call: GET {base-uri}/status/captures

Example: <https://10.3.11.24:8443/status/captures>

CURL Example: curl --user admin:password -insecure --url
<https://192.168.61.10:8443/status/captures>

Response XML: The below table lists and describes the tags included in the Response received from the device.

See [Get Capture Status Response XML](#) in the Appendix of this document for an example XML response for this call.

Device Tags	
wall-clock-time	GMT Time string from the device
api-versions	API Version number of the client being communicated with. The current Capture API is version 3.0.
capture-profiles	The capture profiles able to be captured by the device. These are descriptive text strings that can be used in calls that require capture profile information, such as Create New Capture . Capture Profiles appear in the WebUI as a dropdown box for the user to select what type of adhoc capture to run.
next	A capture data block describing the next scheduled capture (if any), including the information shown for the Capture Tags described below.
current	A capture data block describing the currently running capture (if any), including the information shown for the Capture Tags described below.
Capture Tags	
type	Type of capture.
start-time	GMT Time/Date string for when the capture started or is scheduled to start.
duration	Number of seconds for which the capture is configured to run.
title	The title of the course being captured.
section	The section being captured, showing both the GUID and the Section Name.
presenters	List of presenters for the section, including both the name and GUID or Alternate ID for each presenter.
capture-profile id	The GUID (unique identifier) for the capture profile configured for this capture.
name	The plain text name of the capture profile (product group) configured for this capture. The Product Tags shown below identify the specific information about this capture profile inputs.

Product Tags	
source name / type	Identifies each of the capture input sources for the capture profile (product group) being used for the capture. Each source section provides information about each, as identified in the below entries.
audio	Identifies the below parameters as audio settings
-- source name	Name given to the source input.
-- input	Configuration of the input (e.g., balanced)
-- mode	Channel mode of input: stereo or mono
-- analog-gain	Setting of the analog gain input
-- samplerate	The number of samples of audio carried per second
-- gain	Gain setting of the input
-- agc	Whether or not automatic gain control is set: true or false.
display	Identifies the below parameters as display settings
-- source name	Name given to the source input.
-- channel	The input channel for this source
-- input	The input method for the source (i.e., dvi or composite)
-- brightness	Brightness setting for the source input
-- contrast	Contrast setting for the source input
-- saturation	Saturation setting for the source input
-- framerate	Framerate setting for the source input
-- width	Width setting of the display resolution
-- height	Height setting of the display resolution
-- fix-aspect-ratio	Whether the aspect ratio of the display input is fixed (true or false)
-- is-display	Identifies whether the input is display or not. Shows true if the source is from a display (as from a computer screen); shows false if the source is video input.
video	Identifies the below parameters as video settings
-- source name	Name given to the source input.
-- channel	The input channel for this source
-- input	The input method for the source (i.e., dvi or composite)
-- brightness	Brightness setting for the source input

-- contrast	Contrast setting for the source input
-- saturation	Saturation setting for the source input
-- framerate	Framerate setting for the source input
-- width	Width setting of the display resolution
-- height	Height setting of the display resolution
-- fix-aspect-ratio	Whether the aspect ratio of the display input is fixed (true or false)
-- is-display	Identifies whether the input is display or not. Shows false if the source is from a video input; shows true if the source is from a display.
-- standard	Identifies the video standard being used for the input, either NTSC or PAL.
Transformation to Output Tags	
transform name / type	Identifies the name and type given to the output stream being generated.
input	Identifies which source input this transformed output is being generated for.
codec	The type of encoding being used for this output.
encode-on-host	Whether the encoding is being done on the host device.
codec-parameters	Identifies the below tags as the parameters for the encoding for this output. Some/All of the below tags may appear, depending on the type of output file being generated (based on input type).
-- bitrate-control	Identifies the control mechanism being used for bitrate settings.
-- bitrate	Identifies the bitrate for the output file
-- max-bitrate	Identifies the maximum possible bitrate for the output file.
-- profile	The codec profile being used for the transformed output, i.e., 1c for audio or base for video.
-- frames-per-keyframe	Number of frames per interval for the output.
sink-name	Identifies the final output being created for each transformed input, including the tag information below.
-- input	The transform name being used to generate this final output file.
-- output <type>	The type of item being generated as output.

-- output <filename>	The actual filename of the output file being generated for this transformed input stream.
-----------------------------------	---

3.1.3 Get Next Capture Status

Returns information on the status of only the next capture.

Call: GET {base-uri}/status/next_capture

Example: https://10.3.11.24:8443/status/next_captures

CURL Example: curl --user admin:password -insecure --url https://192.168.61.10:8443/status/next_capture

Response XML: Refer to the tags defined in the table in [section 3.1.2 above](#) for details on the information returned for this call.

For an example XML response for this call, see [Get Next Capture Status Response XML](#) in the Appendix of this document.

3.1.4 Get Current Capture Status

Returns information on the status of only the current capture.

Call: GET {base-uri}/status/current_capture

Example: https://10.3.11.24:8443/status/current_capture

CURL Example: curl --user admin:password -insecure --url https://192.168.61.10:8443/status/current_capture

Response XML: Refer to the tags defined in the table in [section 3.1.2 above](#) for details on the information returned for this call.

For an example XML response for this call, see [Get Current Capture Status Response XML](#) in the Appendix of this document.

3.1.5 Get Capture Status with Monitoring Information

Returns real-time monitoring information on the current capture. This call is useful for returning the filename for a thumbnail (display or video) to use in the [Show Current Video or Display View](#) API call described in [section 3.1.6 below](#).

Call: GET {base-uri}/status/monitoring

Example: https://10.3.11.24:8443/status/monitoring

CURL Example: curl --user admin:password -insecure --url https://192.168.61.10:8443/status/monitoring

The Response XML includes the information outlined in the below table. An example is provided below the table.

Capture Status Tags	
state	State of the current capture, e.g., active or pending.
start-time	GMT Time/Date string for when the capture started or is scheduled to start.
duration	Number of seconds for which the capture is configured to run.
output-type	The type of output being generated for this capture. This indicates if the output is to be streamed live, archived (made into an echo), or both.
Source Tags	
class	Identifies the source input to which the subsequent parameters apply (audio, video, vga, etc.). These tags are described below and some/all of these tags appear, depending on the class identified.
subclass	Subclass of the class/source identified (e.g., pcm, display, video).
name	Name of the input stream of the class/source.
signal-present	Boolean value identifying if there is a signal present during capture (true or false)
thumbnail	The file name of the thumbnail image of the capture input (display or video). This is the filename that can be used in the Show Current Video or Display View API call described in section 3.1.6 below .
format	Format of the source.
channels	Audio channel information including: <ul style="list-style-type: none"> • position: audio position (right or left) • average: average audio level • peak: peak audio level.
confidence-monitoring	Whether the capture input is being monitored: true or false.

Response XML:

```

<status>
  <state>active</state>
  <start-time>2014-02-12T15:33:12.000Z</start-time>
  <duration>900</duration>
  <output-type>archive</output-type>
  <sources>
<source>

```

```

<class>audio</class>
<subclass>pcm</subclass>
<name>audio-stream0</name>
<signal-present>>false</signal-present>
<format>pcm</format>
<supported>>true</supported>
<channels>
<channel>
<position>left</position>
<average>1</average>
<peak>5</peak>
</channel>
<channel>
<position>right</position>
<average>1</average>
<peak>5</peak>
</channel>
</channels>
</source>
<source>
<class>vga</class>
<subclass>display</subclass>
<name>graphics-channel1-stream0</name>
<signal-present>>false</signal-present>
<thumbnail>vga_display_graphics-channel1-stream0.jpg</thumbnail>
</source>
<source>
<class>video</class>
<subclass>ntsc</subclass>
<name>graphics-channel2-stream0</name>
<signal-present>>false</signal-present>
<thumbnail>video_ntsc_graphics-channel2-stream0.jpg</thumbnail>
</source>
</sources>
<confidence-monitoring>>true</confidence-monitoring>
</status>

```

3.1.6 Show Current Video or Display View

Returns a snapshot image of the video or display input for the current capture. This is an image of what the Video input or Display input for the current capture is at the moment the call is made.

Use the filename information returned from the [Get Capture Status](#) call described in [section 3.1.5](#) immediately above.

Request: Provide data for each of the parameters described in the below table.

Parameter	Description
duration	How long, in seconds, the capture is to be.
capture_profile_name	The capture profile name or Product Group output to be used for the capture. The options available for the device can be obtained from the <capture-profiles> returned using the Get System Status call described in section 3.1.1 of this document.
description	A string that provides a name for the capture.

Call:

- **Video:** GET {base-uri}/monitoring/{filename-of-Video-Snapshot.jpg}
- **Display:** GET {base-uri}/monitoring/{filename-of-Display-Snapshot.jpg}

Example: https://10.3.11.24:8443/monitoring/video_ntsc_graphics-channel2-stream0.jpg

CURL Examples:

- **Video:** curl --user admin:password --insecure --data 'duration=900&capture_profile_name=Display/Video (Podcast/Vodcast/EchoPlayer). Optimized for quality/full motion video&description=test-description' --url https://192.168.61.10:8443/monitoring/video_ntsc_graphics-channel2-stream0.jpg
- **Display:** curl --user admin:password --insecure --data 'duration=900&capture_profile_name=Display/Video (Podcast/Vodcast/EchoPlayer). Optimized for quality/full motion video&description=test-description' --url https://192.168.61.10:8443/monitoring/vga_display_graphics-channel1-stream0.jpg

Response: Returns the image captured from the video or display input, depending on which call was made.

3.1.7 Get User Sections

Returns a list of the sections assigned to the user whose credentials (username and password) are sent with the API call. Response includes both Section Name and GUID along with the capture profile configured for each section.

Call: GET {base-uri}/status/get_user_sections

Example: https://10.3.11.24:8443/status/get_user_sections

CURL Example: curl --user instructor:password --insecure --url https://192.168.61.10:8443/status/get_user_sections

Response XML:

```
<sections>
  <section ref="ec7a622a-da43-4a31-897f-841ea192f63d">
```

```
<name>Underwater Basket Weaving 101 (UWBW-101-100) Spring
2014</name>
  <capture-profile ref="74156b84-8edb-4016-a597-
35abc0c1c486">Display Only (Podcast/Vodcast/EchoPlayer) .
Balanced between file size &#038; quality</capture-profile>
  <products /> </section>
</sections>
```

3.1.8 Get Authenticated User Reference ID

Returns the user reference ID (GUID) of the user whose credentials (username and password) are sent with the API call.

Call: GET {base-uri}/status/get_user_ref

Example: https://10.3.11.24:8443/status/get_user_ref

CURL Example: curl --user admin:password -insecure --url
https://192.168.61.10:8443/status/get_user_ref

Response XML:

```
<authenticated-user-ref>9d56966e-3b39-4e26-b0f4-
58bebc3ec4de</authenticated-user-ref>
```

3.2 Diagnostics API Calls

The API calls identified below retrieve and perform diagnostic and maintenance duties for the capture device identified in the call. This section includes log retrieval calls.

The API calls in this section can only be performed by an Administrator.

3.2.1 Post Device.xml

This allows users to re-upload or upload a fresh device.xml to an Echo360 PRO device or an Echo360 POD device. This call will NOT work for a SafeCapture HD device.

NOTE: This is the only REST API command that will work prior to a device being initialized for the first time.

Call: POST {base-uri}/config/upload/device.xml

Example: https://10.3.11.24:8443/config/upload/device.xml

CURL Example: curl -user admin:password -X POST -d @device.xml -insecure -url
http://10.3.11.24:8443/config/upload/device.xml

Response:

```
200 OK
```

3.2.2 Clear User Cache

Clears the user cache on the device.

Generally speaking, most Capture API calls can be performed by either “local users”, such as an admin or instructor, or system users, such as capture devices. When a user accesses any of the capture API calls, the user is authenticated against the active learning platform. The API sends the credentials to the cloud and the system responds to the API indicating authentication (or failure) for the user. This process can take some time, so it is not done for every call. Instead, whenever successful authentication occurs, the API caches the user credentials and validates against that, speeding up response time. However, if an administrator changes a user’s password, deletes an account or a device, or other similar action, the Capture API has no way of knowing. In this instance, the admin can either, reset/power cycle the capture device, or use this API call to force clear the cache.

Call: POST {base-uri}/diagnostics/clear_cache

Example: https://10.3.11.24:8443/diagnostics/clear_cache

CURL Example: curl --user admin:password --insecure --url https://192.168.61.10:8443/diagnostics/clear_cache

Response:

```
User Cache Cleared Successfully.
```

3.2.3 Ping Host Connectivity

Test the connectivity of a host or an IP using the ping utility.

Call: POST {base-uri}/diagnostics/ping/www.google.com

Example: https://10.3.11.24:8443/diagnostics/ping/www.google.com

CURL Example: curl --user admin:password --insecure --url https://192.168.61.10:8443/diagnostics/ping/www.google.com

Response:

```
Ping successful: www.google.com
```

3.2.4 Trace Route Path and Time

Returns the route path and transit time of a host on an IP.

Call: POST {base-uri}/diagnostics/traceroute/www.google.com

Example: https://10.3.11.24:8443/diagnostics/traceroute/www.google.com

CURL Example: curl --user admin:password --insecure --url https://192.168.61.10:8443/diagnostics/traceroute/www.google.com

Response:

```
tracert to www.google.com (74.125.228.83), 30 hops max, 60
byte packets<br/> 1 pfsense.echo360.local (192.168.60.1) 0.089
ms<br/> 2 10.3.10.1 (10.3.10.1) 0.833 ms<br/> 3 74.10.95.1
(74.10.95.1) 3.005 ms<br/> 4 205.232.184.113 (205.232.184.113)
3.108 ms<br/> 5 ge-0-0-0-1-12.tycrva03h00cr01.paetec.net
(169.130.97.8) 6.002 ms<br/> 6 so-1-0-
1.asbnvacyh43ig02.paetec.net (169.130.80.37) 91.006 ms<br/> 7
ge-5-0-0.asbnvacyh43ig02.paetec.net (209.252.156.18) 3.193
ms<br/> 8 eqixva-google-gige.google.com (206.126.236.21) 4.374
ms<br/> 9 209.85.252.46 (209.85.252.46) 5.911 ms<br/>10
72.14.238.247 (72.14.238.247) 6.345 ms<br/>11 iad23s07-in-
f19.1e100.net (74.125.228.83) 6.058 ms<br/>
```

3.2.5 Restart Appliance Executables

Restarts all of the appliance executables.

Call: POST {base-uri}/diagnostics/restart_all

Example: https://10.3.11.24:8443/diagnostics/restart_all

CURL Example: curl --user admin:password --insecure --url
https://192.168.61.10:8443/diagnostics/restart_all

Response:

```
Restarting appliance executables...
```

3.2.6 Reboot Appliance

Performs a soft reboot of the appliance.

Call: POST {base-uri}/diagnostics/reboot

Example: https://10.3.11.24:8443/diagnostics/reboot

CURL Example: curl --user admin:password --insecure --url
https://192.168.61.10:8443/diagnostics/reboot

Response:

```
Rebooting appliance ...
```

3.2.7 Get Appliance Network Configuration

Returns the network configuration for the appliance.

Call: GET {base-uri}/diagnostics/system-info/ifconfig

Example: https://10.3.11.24:8443/diagnostics/system-info/ifconfig

CURL Example: curl --user admin:password --insecure --url
https://192.168.61.10:8443/diagnostics/system-info/ifconfig

Response:

```

eth0      Link encap:Ethernet  HWaddr 00:1c:08:00:14:04
          inet addr:192.168.61.10  Bcast:192.168.63.255
Mask:255.255.252.0
          inet6 addr: fe80::21c:8ff:fe00:1404/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:5672 errors:0 dropped:0 overruns:0 frame:0
          TX packets:5698 errors:0 dropped:0 overruns:0
carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:914158 (892.7 KiB)  TX bytes:1240932 (1.1
MiB)
          Interrupt:19 Base address:0xa000

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:558 errors:0 dropped:0 overruns:0 frame:0
          TX packets:558 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:80582 (78.6 KiB)  TX bytes:80582 (78.6 KiB)

tun0      Link encap:UNSPEC  HWaddr 00-00-00-00-00-00-00-00-00-
00-00-00-00-00-00-00
          inet addr:172.25.10.10  P-t-P:172.25.11.11
Mask:255.255.255.255
          UP POINTOPOINT RUNNING NOARP MULTICAST  MTU:1500
Metric:1
          RX packets:14 errors:0 dropped:0 overruns:0 frame:0
          TX packets:18 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:500
          RX bytes:1264 (1.2 KiB)  TX bytes:1680 (1.6 KiB)

tun1      Link encap:UNSPEC  HWaddr 00-00-00-00-00-00-00-00-00-
00-00-00-00-00-00
          inet addr:172.25.20.20  P-t-P:172.25.22.22
Mask:255.255.255.255
          UP POINTOPOINT RUNNING NOARP MULTICAST  MTU:1500
Metric:1
          RX packets:14 errors:0 dropped:0 overruns:0 frame:0
          TX packets:18 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:500
          RX bytes:1264 (1.2 KiB)  TX bytes:1680 (1.6 KiB)

```

3.2.8 Get Appliance Tasks

Returns the current tasks file for the appliance. The task file is basically a list of the currently scheduled captures (tasks) for the device.

Call: GET {base-uri}/diagnostics/system-info/tasks

Example: https://10.3.11.24:8443/diagnostics/system-info/tasks

CURL Example: curl --user admin:password --insecure --url https://192.168.61.10:8443/diagnostics/system-info/tasks

Response XML: For an example XML response for this call, see [Get Appliance Tasks Response XML](#) in the Appendix of this document.

3.2.9 Get Device Configuration File

Returns the contents of the device XML file for the appliance.

Call: GET {base-uri}/diagnostics/system-info/device

Example: https://10.3.11.24:8443/diagnostics/system-info/device

CURL Example: curl --user admin:password --insecure --url https://192.168.61.10:8443/diagnostics/system-info/device

Response XML: For an example XML response for this call, see [Get Device Configuration File Response XML](#) in the Appendix of this document.

3.2.10 Get Device Processes

Returns a list of the processes currently running on the appliance.

Call: GET {base-uri}/diagnostics/system-info/top

Example: https://10.3.11.24:8443/diagnostics/system-info/top

CURL Example: curl --user admin:password --insecure --url https://192.168.61.10:8443/diagnostics/system-info/top

Response XML: For an example XML response for this call, see [Get Device Processes Response XML](#) in the Appendix of this document.

3.2.11 Get Device Message Buffer

Returns the message buffer of the appliance kernel.

Call: GET {base-uri}/diagnostics/system-info/dmesg

Example: https://10.3.11.24:8443/diagnostics/system-info/dmesg

CURL Example: curl --user admin:password --insecure --url https://192.168.61.10:8443/diagnostics/system-info/dmesg

Response: For an example XML response for this call, see [Get Device Message Buffer Response XML](#) in the Appendix of this document.

3.2.12 Get Saved Content on the Device

Returns a list of all saved content on the device. Can be used to determine if recovery of a capture is necessary, and if so, to obtain the capture ID of the capture to be re-uploaded.

Call: GET {base-uri}/diagnostics/recovery/saved-content

Example: https://10.3.11.24:8443/diagnostics/recovery/saved-content

CURL Example: curl --user admin:password --insecure --url https://192.168.61.10:8443/diagnostics/recovery/saved-content

Response XML:

```
<captures>
  <capture version="1.0" id="0797b8dd-4c2d-415a-adf9-
  daf7f10e1759">
    <title>Underwater Basket Weaving 101 (UWBW-101-100) Spring
    2014</title>
    <start-time>2014-02-12T15:30:00.000Z</start-time>
    <duration>3000</duration>
    <section ref="ec7a622a-da43-4a31-897f-841ea192f63d">Underwater
    Basket Weaving 101 (UWBW-101-100) Spring 2014</section>
    <capture-profile ref="74156b84-8edb-4016-a597-35abc0c1c486" />
    <presenters>
      <presenter ref="9d56966e-3b39-4e26-b0f4-58bebc3ec4de">John
      Doe</presenter>
    </presenters>
    <device ref="00-1c-08-00-14-04" />
  </capture></captures>
```

3.2.13 Re-Upload Content from the Device to the Echo360 active learning platform

Reuploads saved content from the device to the cloud. Use the capture ID returned from the [Get Saved Content on the Device](#) call identified in [section 3.2.11 above](#) to identify the capture to upload and obtain the capture ID.

Call: POST {base-uri}/diagnostics/{capture-id}/upload

Example: https://10.3.11.24:8443/diagnostics/{capture-id}/upload

CURL Example: curl --user admin:password --insecure --url https://192.168.61.10:8443/diagnostics/recovery/0797b8dd-4c2d-415a-adf9-daf7f10e1759/upload

Response:

```
<HTML><HEAD><TITLE>200 OK</TITLE></HEAD><BODY><H4>200 OK</H4>
Successfully moved 0797b8dd-4c2d-415a-adf9-daf7f10e1759
</BODY></HTML>
```

3.2.14 Retrieve the Last X Number of Log Messages

Returns the last x number of log messages specified in the call.

Call: GET {base-uri}/log-list-last-count/{#}

Example: https://10.3.11.24:8443/log-list-last-count/3

CURL Example: curl --user admin:password --insecure --url https://192.168.61.10:8443/log-list-last-count/3

Response:

```
<log-entries>
  <log-entry>
<![CDATA[ch2: Composite='none_idle' DVI='none_idle'
VGA='none_idle'
level: Stats
message: "Channel 2: Composite='none_idle' DVI='none_idle'
VGA='none_idle'"
pid: 23106
service: SystemStatus
source-file: src/SystemStatusService.cpp:335
type: SystemStatusService
version: 5.4.39512
when: 2014-02-12T17:37:52.365Z
who: echo001404
]]>
</log-entry>
  <log-entry>
<![CDATA[ch1: Composite='none_idle' DVI='none_idle'
VGA='none_idle'
level: Stats
message: "Channel 1: Composite='none_idle' DVI='none_idle'
VGA='none_idle'"
pid: 23106
service: SystemStatus
source-file: src/SystemStatusService.cpp:332
type: "SystemStatusService: "
version: 5.4.39512
when: 2014-02-12T17:37:52.365Z
who: echo001404
]]>
</log-entry>
  <log-entry>
<![CDATA[level: Stats
message: "Temperature: Congatec Board: 46.0 C"
pid: 23106
```

```

service: SystemStatus
source-file: src/SystemStatusService.cpp:251
temp: 46.0
type: SystemTemperature
version: 5.4.39512
when: 2014-02-12T17:37:52.364Z
who: echo001404
]]>
</log-entry>
</log-entries>

```

3.3 Capture Control API Calls

The API calls described below are used to create and manipulate captures performed by the capture device identified in the call.

3.3.1 Create New Capture

Creates and starts a new ad hoc capture using the parameters described in the table below. All parameters must be defined.

Call: POST {base-uri}/capture/new_capture

Http Request header: Content-Type=application/xml

Request: Provide data for each of the parameters described in the below table.

Parameter	Description
duration	How long, in seconds, the capture is to be.
capture_profile_name	The capture profile name or Product Group output to be used for the capture. The options available for the device can be obtained from the <capture-profiles> returned using the Get System Status call described in section 3.1.1 of this document.
description	A string that provides a name for the capture.

CURL Example: curl --user admin:password --insecure --data 'duration=300&capture_profile_name=Display/Video (Podcast/Vodcast/EchoPlayer). Optimized for quality/full motion video&description=test-description' --url https://192.168.61.10:8443/capture/new_capture

Response:

```
<ok text="Capture scheduled for start" />
```

3.3.2 Create “Confidence Monitor” Capture

Creates and starts a new ad hoc “confidence monitor” capture, providing monitoring of the capture. All parameters, described in the below table, must be defined.

A confidence monitor is a dummy capture that does not get archived, sent to the cloud, or saved in any way. In all other regards, this call functions the same as a “new_capture” call described immediately above.

If you want to confirm a real capture will work, use the [Show Current Video or Display View](#) call described in [section 3.1.6 above](#).

Call: POST {base-uri}/capture/confidence_monitor

Http Request header: Content-Type=application/xml

Request: Provide data for each of the parameters described in the below table.

Parameter	Description
duration	How long, in seconds, the capture is to be.
capture_profile_name	The capture profile name or Product Group output to be used for the capture. The options available for the device can be obtained from the <capture-profiles> returned using the Get System Status call described in section 3.1.1 of this document.
description	A string that provides a name for the capture.

CURL Example: curl --user admin:password --insecure --data 'duration=900&capture_profile_name=Display/Video (Podcast/Vodcast/EchoPlayer). Optimized for quality/full motion video&description=test-description' --url https://192.168.61.10:8443/capture/confidence_monitor

Response:

```
<ok text="Capture scheduled for start" />
```

3.3.3 Extend a Capture

Sends a command to extend the current capture by the amount of time, in seconds, provided in the *duration* parameter. Captures cannot be extended past the start time of the next scheduled capture.

If the capture cannot be extended for the duration identified, the capture will be extended as far as possible within the given schedule constraints.

Call: POST {base-uri}/capture/extend

Http Request header: Content-Type=application/xml

Request: Provide duration of extension in number of seconds. For example, *duration=600* extends the capture by 10 minutes.

CURL Example: curl --user admin:password --insecure --data 'duration=600' --url https://192.168.61.10:8443/capture/extend

Response:

```
<ok text="Extend by 600 seconds received" />
```

3.3.4 Pause a Capture

Sends a command to pause the current recording. There must be a running capture in the recording state for this command to have any effect.

Call: POST {base-uri}/capture/pause

CURL Example: curl --user admin:password --insecure --data " --url https://192.168.61.10:8443/capture/pause

Response:

```
<ok text="Command (pause) submitted" />
```

3.3.5 Start or Resume a Capture

Sends a command to start recording. This command only works under following two conditions:

- There is a running capture that is currently paused. This command resumes the paused capture.
- There is a scheduled capture in the "waiting" or pre-roll state. This command allows you to start the scheduled recording early/immediately.

Call: POST {base-uri}/capture/record

CURL Example: curl --user admin:password --insecure --data " --url https://192.168.61.10:8443/capture/record

Response:

```
<ok text="Command (record) submitted" />
```

3.3.6 Stop a Capture

Sends the command to stop recording. There must be a currently recording capture for this command to have any effect. NOTE that captures are processed and uploaded immediately upon stopping the capture.

Call: POST {base-uri}/capture/stop

CURL Example: curl --user admin:password --insecure --data " --url https://192.168.61.10:8443/capture/stop

Response:

```
<ok text="Command (stop) submitted" />
```

Appendix: Response XML Examples

The Response XML from calls in this document that are too long to include in the main part of the text are contained here in this appendix. Each section contains a cross-reference link to the corresponding Response XML listed here.

Get Capture Status Response XML

The below is the Response XML from the call defined in [section 3.1.2 - Get Capture Status](#) of this document.

```
<status>
  <wall-clock-time>2014-02-12T15:02:19.037Z</wall-clock-time>
  <api-versions>
    <api-version>3.0</api-version>
  </api-versions>
  <capture-profiles>
<capture-profile>Audio Only (Podcast). Balanced between file size
&#038; quality</capture-profile>
<capture-profile>Display Only (Podcast/Vodcast/EchoPlayer).
Balanced between file size &#038; quality</capture-profile>
<capture-profile>Display/Video (Podcast/Vodcast/EchoPlayer).
Balanced between file size &#038; quality</capture-profile>
<capture-profile>Display/Video (Podcast/Vodcast/EchoPlayer).
Optimized for quality/full motion video</capture-profile>
<capture-profile>Dual Display (Podcast/Vodcast/EchoPlayer).
Optimized for file size &#038; bandwidth</capture-profile>
<capture-profile>Dual Video (Podcast/Vodcast/EchoPlayer) - Balance
between file size &#038; quality</capture-profile>
<capture-profile>Dual Video (Podcast/Vodcast/EchoPlayer) - High
Quality</capture-profile>
<capture-profile>Video Only (Podcast/Vodcast/EchoPlayer). Balanced
between file size &#038; quality</capture-profile>
  </capture-profiles>
  <monitor-profiles>
<monitor-profile>Display/Video (Podcast/Vodcast/EchoPlayer).
Balanced between file size &#038; quality</monitor-profile>
  </monitor-profiles>
<next>
  <type>media</type>
  <start-time>2014-02-12T23:00:00.000Z</start-time>
  <duration>3000</duration>
<parameters>
  <title>Underwater Basket Weaving 101 (UWBW-101-100)
Spring 2014</title>
```

```

    <section ref="ec7a622a-da43-4a31-897f-
841ea192f63d">Underwater Basket Weaving 101 (UWBW-101-100) Spring
2014</section>
    <presenters>
      <presenter ref="9d56966e-3b39-4e26-b0f4-
58bebc3ec4de">John Doe</presenter>
    </presenters>
    <capture-profile id="830d7947-0926-487c-8c64-
72b06c1de1e4">
      <name>Display/Video (Podcast/Vodcast/EchoPlayer).
Optimized for quality/full motion video</name>
      <output-type>archive</output-type>
      <products>
        <product>
          <source name="audio" type="audio">
            <input>balanced</input>
            <mode>stereo</mode>
            <analog-gain>-6</analog-gain>
            <samplerate>44100</samplerate>
            <gain>0</gain>
            <agc>>false</agc>
          </source>
          <source name="graphics1" type="graphics">
            <channel>1</channel>
            <input>dvi</input>
            <brightness>50</brightness>
            <contrast>50</contrast>
            <saturation>50</saturation>
            <framerate>10.0</framerate>
            <width>960</width>
            <height>720</height>
            <fix-aspect-ratio>>true</fix-aspect-ratio>
            <is-display>>true</is-display>
          </source>
          <source name="graphics2" type="graphics">
            <channel>2</channel>
            <input>composite</input>
            <brightness>50</brightness>
            <contrast>50</contrast>
            <saturation>50</saturation>
            <framerate>29.97</framerate>
            <width>704</width>
            <height>480</height>
            <fix-aspect-ratio>>true</fix-aspect-ratio>
            <is-display>>false</is-display>
          </source>
        </product>
      </products>
    </capture-profile>
  </section>

```

```

    <standard>ntsc</standard>
  </source>
  <transform name="audio-archive" type="encoder">
    <input>audio</input>
    <codec>aac</codec>
    <encode-on-host>true</encode-on-host>
    <codec-parameters>
      <bitrate>128000</bitrate>
      <profile>lc</profile>
    </codec-parameters>
  </transform>
  <transform name="graphics1-archive" type="encoder">
    <input>graphics1</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>736000</bitrate>
      <max-bitrate>1104000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>50</frames-per-keyframe>
    </codec-parameters>
  </transform>
  <transform name="graphics2-archive" type="encoder">
    <input>graphics2</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>1056000</bitrate>
      <max-bitrate>1584000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>150</frames-per-keyframe>
    </codec-parameters>
  </transform>
  <sink name="audio-archive-file">
    <input>audio-archive</input>
    <output>
      <type>file</type>
      <filename>audio.aac</filename>
    </output>
  </sink>
  <sink name="graphics1-archive-file">
    <input>graphics1-archive</input>
    <output>
      <type>file</type>
      <filename>display.h264</filename>
    </output>
  </sink>

```

```

    </output>
  </sink>
  <sink name="graphics2-archive-file">
    <input>graphics2-archive</input>
    <output>
      <type>file</type>
      <filename>video.h264</filename>
    </output>
  </sink>
</product>
</products>
</capture-profile>
</parameters>
</next><current>
  <schedule>
</schedule>

</current>
</status>

```

Get Next Capture Status Response XML

The below is the Response XML from the call defined in [section 3.1.3 - Get Next Capture Status](#) of this document.

```

<status>
  <wall-clock-time>2014-02-12T15:24:35.835Z</wall-clock-time>
  <api-versions>
    <api-version>3.0</api-version>
  </api-versions>
  <capture-profiles>
<capture-profile>Audio Only (Podcast). Balanced between file size
&#038; quality</capture-profile>
<capture-profile>Display Only (Podcast/Vodcast/EchoPlayer).
Balanced between file size &#038; quality</capture-profile>
<capture-profile>Display/Video (Podcast/Vodcast/EchoPlayer).
Balanced between file size &#038; quality</capture-profile>
<capture-profile>Display/Video (Podcast/Vodcast/EchoPlayer).
Optimized for quality/full motion video</capture-profile>
<capture-profile>Dual Display (Podcast/Vodcast/EchoPlayer).
Optimized for file size &#038; bandwidth</capture-profile>
<capture-profile>Dual Video (Podcast/Vodcast/EchoPlayer) - Balance
between file size &#038; quality</capture-profile>
<capture-profile>Dual Video (Podcast/Vodcast/EchoPlayer) - High
Quality</capture-profile>

```

```

<capture-profile>Video Only (Podcast/Vodcast/EchoPlayer). Balanced
between file size &#038; quality</capture-profile>
  </capture-profiles>
  <monitor-profiles>
<monitor-profile>Display/Video (Podcast/Vodcast/EchoPlayer).
Balanced between file size &#038; quality</monitor-profile>
  </monitor-profiles>
<next>
  <type>media</type>
  <start-time>2014-02-12T23:00:00.000Z</start-time>
  <duration>3000</duration>
<parameters>
  <title>Underwater Basket Weaving 101 (UWBW-101-100)
Spring 2014</title>
  <section ref="ec7a622a-da43-4a31-897f-
841ea192f63d">Underwater Basket Weaving 101 (UWBW-101-100) Spring
2014</section>
  <presenters>
    <presenter ref="9d56966e-3b39-4e26-b0f4-
58bebc3ec4de">John Doe</presenter>
  </presenters>
  <capture-profile id="830d7947-0926-487c-8c64-
72b06c1de1e4">
    <name>Display/Video (Podcast/Vodcast/EchoPlayer).
Optimized for quality/full motion video</name>
    <output-type>archive</output-type>
    <products>
      <product>
        <source name="audio" type="audio">
          <input>balanced</input>
          <mode>stereo</mode>
          <analog-gain>-6</analog-gain>
          <samplerate>44100</samplerate>
          <gain>0</gain>
          <agc>>false</agc>
        </source>
        <source name="graphics1" type="graphics">
          <channel>1</channel>
          <input>dvi</input>
          <brightness>50</brightness>
          <contrast>50</contrast>
          <saturation>50</saturation>
          <framerate>10.0</framerate>
          <width>960</width>
          <height>720</height>

```

```

    <fix-aspect-ratio>true</fix-aspect-ratio>
    <is-display>true</is-display>
  </source>
  <source name="graphics2" type="graphics">
    <channel>2</channel>
    <input>composite</input>
    <brightness>50</brightness>
    <contrast>50</contrast>
    <saturation>50</saturation>
    <framerate>29.97</framerate>
    <width>704</width>
    <height>480</height>
    <fix-aspect-ratio>true</fix-aspect-ratio>
    <is-display>false</is-display>
    <standard>ntsc</standard>
  </source>
  <transform name="audio-archive" type="encoder">
    <input>audio</input>
    <codec>aac</codec>
    <encode-on-host>true</encode-on-host>
    <codec-parameters>
      <bitrate>128000</bitrate>
      <profile>lc</profile>
    </codec-parameters>
  </transform>
  <transform name="graphics1-archive" type="encoder">
    <input>graphics1</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>736000</bitrate>
      <max-bitrate>1104000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>50</frames-per-keyframe>
    </codec-parameters>
  </transform>
  <transform name="graphics2-archive" type="encoder">
    <input>graphics2</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>1056000</bitrate>
      <max-bitrate>1584000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>150</frames-per-keyframe>
  </transform>

```

```

    </codec-parameters>
  </transform>
  <sink name="audio-archive-file">
    <input>audio-archive</input>
    <output>
      <type>file</type>
      <filename>audio.aac</filename>
    </output>
  </sink>
  <sink name="graphics1-archive-file">
    <input>graphics1-archive</input>
    <output>
      <type>file</type>
      <filename>display.h264</filename>
    </output>
  </sink>
  <sink name="graphics2-archive-file">
    <input>graphics2-archive</input>
    <output>
      <type>file</type>
      <filename>video.h264</filename>
    </output>
  </sink>
</product>
</products>
</capture-profile>
</parameters>
</next></status>

```

Get Current Capture Status Response XML

The below is the Response XML from the call defined in [section 3.1.4 - Get Current Capture Status](#) of this document.

```

<status>
  <wall-clock-time>2014-02-12T15:30:12.491Z</wall-clock-time>
  <api-versions>
    <api-version>3.0</api-version>
  </api-versions>
  <capture-profiles>
    <capture-profile>Audio Only (Podcast). Balanced between file size
    &#038; quality</capture-profile>
    <capture-profile>Display Only (Podcast/Vodcast/EchoPlayer).
    Balanced between file size &#038; quality</capture-profile>
  </capture-profiles>
</status>

```



```

    <agc>false</agc>
  </source>
  <source name="graphics1" type="graphics">
    <channel>1</channel>
    <input>dvi</input>
    <brightness>50</brightness>
    <contrast>50</contrast>
    <saturation>50</saturation>
    <framerate>10.0</framerate>
    <width>960</width>
    <height>720</height>
    <fix-aspect-ratio>true</fix-aspect-ratio>
    <is-display>true</is-display>
  </source>
  <transform name="audio-archive" type="encoder">
    <input>audio</input>
    <codec>aac</codec>
    <encode-on-host>true</encode-on-host>
    <codec-parameters>
      <bitrate>128000</bitrate>
      <profile>lc</profile>
    </codec-parameters>
  </transform>
  <transform name="graphics1-archive" type="encoder">
    <input>graphics1</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>736000</bitrate>
      <max-bitrate>1104000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>50</frames-per-keyframe>
    </codec-parameters>
  </transform>
  <sink name="audio-archive-file">
    <input>audio-archive</input>
    <output>
      <type>file</type>
      <filename>audio.aac</filename>
    </output>
  </sink>
  <sink name="graphics1-archive-file">
    <input>graphics1-archive</input>
    <output>
      <type>file</type>

```

```

        <filename>display.h264</filename>
      </output>
    </sink>
  </product>
</products>
</capture-profile>
</parameters>
</schedule>
<state>active</state>
  <start-time>2014-02-12T15:30:00.000Z</start-time>
  <duration>3000</duration>
  <output-type>archive</output-type>
  <sources>
<source>
<class>audio</class>
<subclass>pcm</subclass>
<name>audio-stream0</name>
<signal-present>>false</signal-present>
<format>pcm</format>
<supported>>true</supported>
<channels>
<channel>
<position>left</position>
<average>1</average>
<peak>4</peak>
</channel>
<channel>
<position>right</position>
<average>1</average>
<peak>5</peak>
</channel>
</channels>
</source>
<source>
<class>vga</class>
<subclass>display</subclass>
<name>graphics-channel1-stream0</name>
<signal-present>>false</signal-present>
<thumbnail>vga_display_graphics-channel1-stream0.jpg</thumbnail>
</source>
  </sources>
  <confidence-monitoring>>false</confidence-monitoring>
</current>
</status>

```

Get Appliance Tasks Response XML

The below is the Response XML from the call defined in [section 3.2.7 - Get Appliance Tasks](#) of this document.

```
<?xml version="1.0" encoding="UTF-8"?>
<tasks version="1.0">
  <task id="9069c4ec-1e00-4847-a76e-8bd48f69843e">
    <type>media</type>
    <start-time>2014-02-12T23:00:00.000Z</start-time>
    <duration>3000</duration>
    <serial sid="9069c4ec-1e00-4847-a76e-8bd48f69843e">
      <step sid="capture">
        <worker>capture</worker>
        <priority>high</priority>
        <parameters>
          <title>Underwater Basket Weaving 101 (UWBW-101-100)
Spring 2014</title>
          <section ref="ec7a622a-da43-4a31-897f-
841ea192f63d">Underwater Basket Weaving 101 (UWBW-101-100) Spring
2014</section>
          <presenters>
            <presenter ref="9d56966e-3b39-4e26-b0f4-
58bebc3ec4de">John Doe</presenter>
          </presenters>
          <capture-profile id="830d7947-0926-487c-8c64-
72b06c1de1e4">
            <name>Display/Video (Podcast/Vodcast/EchoPlayer).
Optimized for quality/full motion video</name>
            <output-type>archive</output-type>
            <products>
              <product>
                <source name="audio" type="audio">
                  <input>balanced</input>
                  <mode>stereo</mode>
                  <analog-gain>-6</analog-gain>
                  <samplerate>44100</samplerate>
                  <gain>0</gain>
                  <agc>>false</agc>
                </source>
                <source name="graphics1" type="graphics">
                  <channel>1</channel>
                  <input>dvi</input>
                  <brightness>50</brightness>
                  <contrast>50</contrast>
                  <saturation>50</saturation>
                </source>
              </product>
            </products>
          </capture-profile>
        </parameters>
      </step>
    </serial>
  </task>
</tasks>
```

```

    <framerate>10.0</framerate>
    <width>960</width>
    <height>720</height>
    <fix-aspect-ratio>true</fix-aspect-ratio>
    <is-display>true</is-display>
  </source>
  <source name="graphics2" type="graphics">
    <channel>2</channel>
    <input>composite</input>
    <brightness>50</brightness>
    <contrast>50</contrast>
    <saturation>50</saturation>
    <framerate>29.97</framerate>
    <width>704</width>
    <height>480</height>
    <fix-aspect-ratio>true</fix-aspect-ratio>
    <is-display>false</is-display>
    <standard>ntsc</standard>
  </source>
  <transform name="audio-archive" type="encoder">
    <input>audio</input>
    <codec>aac</codec>
    <encode-on-host>true</encode-on-host>
    <codec-parameters>
      <bitrate>128000</bitrate>
      <profile>lc</profile>
    </codec-parameters>
  </transform>
  <transform name="graphics1-archive" type="encoder">
    <input>graphics1</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>736000</bitrate>
      <max-bitrate>1104000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>50</frames-per-keyframe>
    </codec-parameters>
  </transform>
  <transform name="graphics2-archive" type="encoder">
    <input>graphics2</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>1056000</bitrate>

```

```

        <max-bitrate>1584000</max-bitrate>
        <profile>base</profile>
        <frames-per-keyframe>150</frames-per-keyframe>
    </codec-parameters>
</transform>
<sink name="audio-archive-file">
    <input>audio-archive</input>
    <output>
        <type>file</type>
        <filename>audio.aac</filename>
    </output>
</sink>
<sink name="graphics1-archive-file">
    <input>graphics1-archive</input>
    <output>
        <type>file</type>
        <filename>display.h264</filename>
    </output>
</sink>
<sink name="graphics2-archive-file">
    <input>graphics2-archive</input>
    <output>
        <type>file</type>
        <filename>video.h264</filename>
    </output>
</sink>
</product>
</products>
</capture-profile>
</parameters>
</step>
</serial>
</task>

<signature>HmacSHA256:409b812354c00fab7008a77db243f0258cb2b57fc5f29
34a3e565d13391628d8</signature>
</tasks>

```

Get Device Configuration File Response XML

The below is the Response XML from the call defined in [section 3.2.8 - Get Device Configuration File](#) of this document.

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

<device id="1477690a-65b1-49ba-9b58-9e01f4df6dc0" version="1.0">
  <key>00-1c-08-00-14-04</key>
  <utc-offset>-300</utc-offset>
  <location ref="3b511626-4ab9-424d-a762-2a1da1478ddb">Dulles:
Atlantic Blvd, Appliance Dev Miki's SCHD</location>
  <management-server ref="8804b51d-8186-4fdd-bc76-c958feeb7308">
    <address>https://appl-ess1.echo360.local:8443/ess</address>
  </management-server>
  <shared-
secret>57cc193b34d5c771f8faa5d4d04bdfe93cddc2c53fd8186c104ef427ea3f
7b3aa93c6c2fe2e1d0e8</shared-secret>
  <device-xml-uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/generic/services/tas
k_manager/files/device.xml?time={seconds}</device-xml-uri>
  <network>
    <dhcp>>true</dhcp>
    <ntp-servers>
      <ntp-server>0.echo360.pool.ntp.org</ntp-server>
      <ntp-server>1.echo360.pool.ntp.org</ntp-server>
      <ntp-server>2.echo360.pool.ntp.org</ntp-server>
      <ntp-server>3.echo360.pool.ntp.org</ntp-server>
    </ntp-servers>
  </network>
  <services>
    <service>
      <name>adhoc_control</name>
      <version>5.4.39512</version>
      <command>echo_adhoc_control</command>
      <background-service>>true</background-service>
      <files>
        <file>
          <name>echo_adhoc_control</name>
          <category>worker</category>
          <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/adhoc_control/files/echo_adhoc_control/linux.32/x86/5.4
.39512/SHA-
256%3A1a0bb157f8fc011a6964d299be4cab7bcacf67bfb69983091994d4dd30a044
ed4?time={seconds}&signature={hmac}</uri>
```

```

    <hash>SHA-
256:1a0bb157f8fc011a6964d299be4cab7bcacf67bfb69983091994d4dd30a044ed
4</hash>
  </file>
  <file>
    <name>ca-bundle.crt</name>
    <category>static-config</category>
    <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/adhoc_control/files/ca-
bundle.crt/linux.32/x86/5.4.39512/SHA-
256%3Adfd44974d7d9a1873e0166e0bd44d6966ca7644c3ea7db3f672adbb676880
08c?time={seconds}&signature={hmac}</uri>
    <hash>SHA-
256:dfd44974d7d9a1873e0166e0bd44d6966ca7644c3ea7db3f672adbb67688008
c</hash>
  </file>
  <file>
    <name>device_server.pem</name>
    <category>static-config</category>
    <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/adhoc_control/files/device_server.pem/linux.32/x86/5.4.
39512/SHA-
256%3A85eb56889d705db164bfbaa65d9fde7375ebc4b24807d082a827066bc1794
d83?time={seconds}&signature={hmac}</uri>
    <hash>SHA-
256:85eb56889d705db164bfbaa65d9fde7375ebc4b24807d082a827066bc1794d8
3</hash>
  </file>
  <file>
    <name>requests.xml</name>
    <category>worker</category>
    <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/adhoc_control/files/requests.xml/linux.32/x86/5.4.39512
/SHA-
256%3Ab4d1f5c94125a9fc50ad9868fe27447aecdc8c8f69eb8ef2b97af7166b7a9
6f8?time={seconds}&signature={hmac}</uri>
    <hash>SHA-
256:b4d1f5c94125a9fc50ad9868fe27447aecdc8c8f69eb8ef2b97af7166b7a96f
8</hash>
  </file>
  <file>
    <name>users.xml</name>

```

```

        <category>worker</category>
        <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/adhoc_control/files/users.xml/linux.32/x86/latest/SHA-
256%3A1408ed99ba8fe48088fa2dd09b9af0ded3b62730b1b6451de8655a4faf425
501?time={seconds}&signature={hmac}</uri>
        <hash>SHA-
256:1408ed99ba8fe48088fa2dd09b9af0ded3b62730b1b6451de8655a4faf42550
1</hash>
    </file>
    <file>
        <name>webcontent.zip</name>
        <category>worker</category>
        <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/adhoc_control/files/webcontent.zip/linux.32/x86/5.4.395
12/SHA-
256%3Ad2372bbb6e9d1ed53a98fc3076d02627bf3d6d7b6bf69f5cb911a8e818c48
2b8?time={seconds}&signature={hmac}</uri>
        <hash>SHA-
256:d2372bbb6e9d1ed53a98fc3076d02627bf3d6d7b6bf69f5cb911a8e818c482b
8</hash>
    </file>
</files>
    <upload-info-uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/adHocUploadInfo/pro-hardware-
capture/linux.32/x86/unknown?token={authToken}&size=0</upload-
info-uri>
    <allowed-http-clients>
        <allowed-http-client>*. *.*.*</allowed-http-client>
    </allowed-http-clients>
    <port>8443</port>
    <http-access>>false</http-access>
</service>
<service>
    <name>capture</name>
    <version>5.4.39512</version>
    <command>echo_capture</command>
    <background-service>>false</background-service>
    <files>
        <file>
            <name>echo_capture</name>
            <category>worker</category>
    
```

```

    <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/capture/files/echo_capture/linux.32/x86/5.4.39512/SHA-
256%3Aa9790fa13816f6d9b69646db9de971bdb0086b13bf29f814c3cf3ff627c69
a99?time={seconds}&signature={hmac}</uri>
    <hash>SHA-
256:a9790fa13816f6d9b69646db9de971bdb0086b13bf29f814c3cf3ff627c69a9
9</hash>
  </file>
  <file>
    <name>gstreamer-lib.tgz</name>
    <category>worker</category>
    <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/capture/files/gstreamer-
lib.tgz/linux.32/x86/5.4.39512/SHA-
256%3A5afa32392844cb3caceacd7d11bdbc38bba7fe8f7679eb0616580f209b314
b98?time={seconds}&signature={hmac}</uri>
    <hash>SHA-
256:5afa32392844cb3caceacd7d11bdbc38bba7fe8f7679eb0616580f209b314b9
8</hash>
  </file>
</files>
<default-parameters>
  <capture-profiles>
    <capture-profile id="2810f979-cf4a-4495-a47e-
08210d0af583">
      <name>Audio Only (Podcast). Balanced between file size
& quality</name>
      <output-type>archive</output-type>
      <products>
        <product>
          <source name="audio" type="audio">
            <input>balanced</input>
            <mode>stereo</mode>
            <analog-gain>-6</analog-gain>
            <samplerate>44100</samplerate>
            <gain>0</gain>
            <agc>>false</agc>
          </source>
          <transform name="audio-archive" type="encoder">
            <input>audio</input>
            <codec>aac</codec>
            <encode-on-host>>true</encode-on-host>
            <codec-parameters>

```

```

    <bitrate>128000</bitrate>
    <profile>lc</profile>
  </codec-parameters>
</transform>
<sink name="audio-archive-file">
  <input>audio-archive</input>
  <output>
    <type>file</type>
    <filename>audio.aac</filename>
  </output>
</sink>
</product>
</products>
</capture-profile>
<capture-profile id="74156b84-8edb-4016-a597-
35abc0c1c486">
  <name>Display Only (Podcast/Vodcast/EchoPlayer).
Balanced between file size & quality</name>
  <output-type>archive</output-type>
  <products>
    <product>
      <source name="audio" type="audio">
        <input>balanced</input>
        <mode>stereo</mode>
        <analog-gain>-6</analog-gain>
        <samplerate>44100</samplerate>
        <gain>0</gain>
        <agc>>false</agc>
      </source>
      <source name="graphics1" type="graphics">
        <channel>1</channel>
        <input>dvi</input>
        <brightness>50</brightness>
        <contrast>50</contrast>
        <saturation>50</saturation>
        <framerate>24.0</framerate>
        <width>960</width>
        <height>720</height>
        <fix-aspect-ratio>>true</fix-aspect-ratio>
        <is-display>>true</is-display>
      </source>
    <transform name="audio-archive" type="encoder">
      <input>audio</input>
      <codec>aac</codec>
      <encode-on-host>>true</encode-on-host>

```

```

    <codec-parameters>
      <bitrate>128000</bitrate>
      <profile>lc</profile>
    </codec-parameters>
  </transform>
  <transform name="graphics1-archive" type="encoder">
    <input>graphics1</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>1768000</bitrate>
      <max-bitrate>2656000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>120</frames-per-keyframe>
    </codec-parameters>
  </transform>
  <sink name="audio-archive-file">
    <input>audio-archive</input>
    <output>
      <type>file</type>
      <filename>audio.aac</filename>
    </output>
  </sink>
  <sink name="graphics1-archive-file">
    <input>graphics1-archive</input>
    <output>
      <type>file</type>
      <filename>display.h264</filename>
    </output>
  </sink>
</product>
</products>
</capture-profile>
<capture-profile id="244d88c9-4738-450d-8a50-
bab64fa9e468">
  <name>Display/Video (Podcast/Vodcast/EchoPlayer).
Balanced between file size & quality</name>
  <output-type>archive</output-type>
  <for-monitoring>true</for-monitoring>
</products>
<product>
  <source name="audio" type="audio">
    <input>balanced</input>
    <mode>stereo</mode>
    <analog-gain>-6</analog-gain>
  </source>
</product>

```

```

    <samplerate>44100</samplerate>
    <gain>0</gain>
    <agc>false</agc>
  </source>
  <source name="graphics1" type="graphics">
    <channel>1</channel>
    <input>dvi</input>
    <brightness>50</brightness>
    <contrast>50</contrast>
    <saturation>50</saturation>
    <framerate>10.0</framerate>
    <width>960</width>
    <height>720</height>
    <fix-aspect-ratio>true</fix-aspect-ratio>
    <is-display>true</is-display>
  </source>
  <source name="graphics2" type="graphics">
    <channel>2</channel>
    <input>composite</input>
    <brightness>50</brightness>
    <contrast>50</contrast>
    <saturation>50</saturation>
    <framerate>14.985</framerate>
    <width>704</width>
    <height>480</height>
    <fix-aspect-ratio>true</fix-aspect-ratio>
    <is-display>false</is-display>
    <standard>ntsc</standard>
  </source>
  <transform name="audio-archive" type="encoder">
    <input>audio</input>
    <codec>aac</codec>
    <encode-on-host>true</encode-on-host>
    <codec-parameters>
      <bitrate>128000</bitrate>
      <profile>lc</profile>
    </codec-parameters>
  </transform>
  <transform name="graphics1-archive" type="encoder">
    <input>graphics1</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>736000</bitrate>
      <max-bitrate>1104000</max-bitrate>

```

```

    <profile>base</profile>
    <frames-per-keyframe>50</frames-per-keyframe>
  </codec-parameters>
</transform>
<transform name="graphics2-archive" type="encoder">
  <input>graphics2</input>
  <codec>h264</codec>
  <codec-parameters>
    <bitrate-control>vbr</bitrate-control>
    <bitrate>544000</bitrate>
    <max-bitrate>816000</max-bitrate>
    <profile>base</profile>
    <frames-per-keyframe>75</frames-per-keyframe>
  </codec-parameters>
</transform>
<sink name="audio-archive-file">
  <input>audio-archive</input>
  <output>
    <type>file</type>
    <filename>audio.aac</filename>
  </output>
</sink>
<sink name="graphics1-archive-file">
  <input>graphics1-archive</input>
  <output>
    <type>file</type>
    <filename>display.h264</filename>
  </output>
</sink>
<sink name="graphics2-archive-file">
  <input>graphics2-archive</input>
  <output>
    <type>file</type>
    <filename>video.h264</filename>
  </output>
</sink>
</product>
</products>
</capture-profile>
<capture-profile id="830d7947-0926-487c-8c64-
72b06c1de1e4">
  <name>Display/Video (Podcast/Vodcast/EchoPlayer).
Optimized for quality/full motion video</name>
  <output-type>archive</output-type>
</products>

```

```

<product>
  <source name="audio" type="audio">
    <input>balanced</input>
    <mode>stereo</mode>
    <analog-gain>-6</analog-gain>
    <samplerate>44100</samplerate>
    <gain>0</gain>
    <agc>>false</agc>
  </source>
  <source name="graphics1" type="graphics">
    <channel>1</channel>
    <input>dvi</input>
    <brightness>50</brightness>
    <contrast>50</contrast>
    <saturation>50</saturation>
    <framerate>24.0</framerate>
    <width>960</width>
    <height>720</height>
    <fix-aspect-ratio>>true</fix-aspect-ratio>
    <is-display>>true</is-display>
  </source>
  <source name="graphics2" type="graphics">
    <channel>2</channel>
    <input>composite</input>
    <brightness>50</brightness>
    <contrast>50</contrast>
    <saturation>50</saturation>
    <framerate>29.97</framerate>
    <width>704</width>
    <height>480</height>
    <fix-aspect-ratio>>true</fix-aspect-ratio>
    <is-display>>false</is-display>
    <standard>ntsc</standard>
  </source>
  <transform name="audio-archive" type="encoder">
    <input>audio</input>
    <codec>aac</codec>
    <encode-on-host>>true</encode-on-host>
    <codec-parameters>
      <bitrate>128000</bitrate>
      <profile>lc</profile>
    </codec-parameters>
  </transform>
  <transform name="graphics1-archive" type="encoder">
    <input>graphics1</input>
  </transform>

```

```

    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>1728000</bitrate>
      <max-bitrate>2592000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>120</frames-per-keyframe>
    </codec-parameters>
  </transform>
  <transform name="graphics2-archive" type="encoder">
    <input>graphics2</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>1056000</bitrate>
      <max-bitrate>1584000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>150</frames-per-keyframe>
    </codec-parameters>
  </transform>
  <sink name="audio-archive-file">
    <input>audio-archive</input>
    <output>
      <type>file</type>
      <filename>audio.aac</filename>
    </output>
  </sink>
  <sink name="graphics1-archive-file">
    <input>graphics1-archive</input>
    <output>
      <type>file</type>
      <filename>display.h264</filename>
    </output>
  </sink>
  <sink name="graphics2-archive-file">
    <input>graphics2-archive</input>
    <output>
      <type>file</type>
      <filename>video.h264</filename>
    </output>
  </sink>
</product>
</products>
</capture-profile>

```

```

    <capture-profile id="585f7589-1063-4297-8e87-
e8b69cda63dd">
      <name>Dual Display (Podcast/Vodcast/EchoPlayer).
Optimized for file size & bandwidth</name>
      <output-type>archive</output-type>
      <products>
        <product>
          <source name="audio" type="audio">
            <input>balanced</input>
            <mode>stereo</mode>
            <analog-gain>-6</analog-gain>
            <samplerate>44100</samplerate>
            <gain>0</gain>
            <agc>>false</agc>
          </source>
          <source name="graphics1" type="graphics">
            <channel>1</channel>
            <input>dvi</input>
            <brightness>50</brightness>
            <contrast>50</contrast>
            <saturation>50</saturation>
            <framerate>10.0</framerate>
            <width>960</width>
            <height>720</height>
            <fix-aspect-ratio>>true</fix-aspect-ratio>
            <is-display>>true</is-display>
          </source>
          <source name="graphics2" type="graphics">
            <channel>2</channel>
            <input>dvi</input>
            <brightness>50</brightness>
            <contrast>50</contrast>
            <saturation>50</saturation>
            <framerate>24.0</framerate>
            <width>960</width>
            <height>720</height>
            <fix-aspect-ratio>>true</fix-aspect-ratio>
            <is-display>>true</is-display>
          </source>
          <transform name="audio-archive" type="encoder">
            <input>audio</input>
            <codec>aac</codec>
            <encode-on-host>>true</encode-on-host>
            <codec-parameters>
              <bitrate>128000</bitrate>
            </codec-parameters>
          </transform>
        </product>
      </products>
    </capture-profile>
  
```

```

    <profile>lc</profile>
  </codec-parameters>
</transform>
<transform name="graphics1-archive" type="encoder">
  <input>graphics1</input>
  <codec>h264</codec>
  <codec-parameters>
    <bitrate-control>vbr</bitrate-control>
    <bitrate>736000</bitrate>
    <max-bitrate>1104000</max-bitrate>
    <profile>base</profile>
    <frames-per-keyframe>50</frames-per-keyframe>
  </codec-parameters>
</transform>
<transform name="graphics2-archive" type="encoder">
  <input>graphics2</input>
  <codec>h264</codec>
  <codec-parameters>
    <bitrate-control>vbr</bitrate-control>
    <bitrate>1568000</bitrate>
    <max-bitrate>2352000</max-bitrate>
    <profile>base</profile>
    <frames-per-keyframe>120</frames-per-keyframe>
  </codec-parameters>
</transform>
<sink name="audio-archive-file">
  <input>audio-archive</input>
  <output>
    <type>file</type>
    <filename>audio.aac</filename>
  </output>
</sink>
<sink name="graphics1-archive-file">
  <input>graphics1-archive</input>
  <output>
    <type>file</type>
    <filename>display.h264</filename>
  </output>
</sink>
<sink name="graphics2-archive-file">
  <input>graphics2-archive</input>
  <output>
    <type>file</type>
    <filename>display2.h264</filename>
  </output>

```

```

    </sink>
  </product>
</products>
</capture-profile>
<capture-profile id="5c2042f7-9034-4774-b795-
190b6ddeced9">
  <name>Dual Video (Podcast/Vodcast/EchoPlayer) - Balance
between file size & quality</name>
  <output-type>archive</output-type>
  <products>
    <product>
      <source name="audio" type="audio">
        <input>balanced</input>
        <mode>stereo</mode>
        <analog-gain>-6</analog-gain>
        <samplerate>22050</samplerate>
        <gain>0</gain>
        <agc>>false</agc>
      </source>
      <source name="graphics1" type="graphics">
        <channel>1</channel>
        <input>composite</input>
        <brightness>50</brightness>
        <contrast>50</contrast>
        <saturation>50</saturation>
        <framerate>29.97</framerate>
        <width>704</width>
        <height>480</height>
        <fix-aspect-ratio>>true</fix-aspect-ratio>
        <is-display>>false</is-display>
        <standard>ntsc</standard>
      </source>
      <source name="graphics2" type="graphics">
        <channel>2</channel>
        <input>composite</input>
        <brightness>50</brightness>
        <contrast>50</contrast>
        <saturation>50</saturation>
        <framerate>29.97</framerate>
        <width>704</width>
        <height>480</height>
        <fix-aspect-ratio>>true</fix-aspect-ratio>
        <is-display>>false</is-display>
        <standard>ntsc</standard>
      </source>
    </product>
  </products>
</capture-profile>

```

```

<transform name="audio-archive" type="encoder">
  <input>audio</input>
  <codec>aac</codec>
  <encode-on-host>true</encode-on-host>
  <codec-parameters>
    <bitrate>64000</bitrate>
    <profile>lc</profile>
  </codec-parameters>
</transform>
<transform name="graphics1-archive" type="encoder">
  <input>graphics1</input>
  <codec>h264</codec>
  <codec-parameters>
    <bitrate-control>vbr</bitrate-control>
    <bitrate>720000</bitrate>
    <max-bitrate>1080000</max-bitrate>
    <profile>base</profile>
    <frames-per-keyframe>150</frames-per-keyframe>
  </codec-parameters>
</transform>
<transform name="graphics2-archive" type="encoder">
  <input>graphics2</input>
  <codec>h264</codec>
  <codec-parameters>
    <bitrate-control>vbr</bitrate-control>
    <bitrate>1080000</bitrate>
    <max-bitrate>1624000</max-bitrate>
    <profile>base</profile>
    <frames-per-keyframe>150</frames-per-keyframe>
  </codec-parameters>
</transform>
<sink name="audio-archive-file">
  <input>audio-archive</input>
  <output>
    <type>file</type>
    <filename>audio.aac</filename>
  </output>
</sink>
<sink name="graphics1-archive-file">
  <input>graphics1-archive</input>
  <output>
    <type>file</type>
    <filename>video2.h264</filename>
  </output>
</sink>

```

```

    <sink name="graphics2-archive-file">
      <input>graphics2-archive</input>
      <output>
        <type>file</type>
        <filename>video.h264</filename>
      </output>
    </sink>
  </product>
</products>
</capture-profile>
<capture-profile id="ccc756ef-c12e-4097-975e-
4f9e1bafcl1a2">
  <name>Dual Video (Podcast/Vodcast/EchoPlayer) - High
Quality</name>
  <output-type>archive</output-type>
  <products>
    <product>
      <source name="audio" type="audio">
        <input>balanced</input>
        <mode>stereo</mode>
        <analog-gain>-6</analog-gain>
        <samplerate>44100</samplerate>
        <gain>0</gain>
        <agc>>false</agc>
      </source>
      <source name="graphics1" type="graphics">
        <channel>1</channel>
        <input>composite</input>
        <brightness>50</brightness>
        <contrast>50</contrast>
        <saturation>50</saturation>
        <framerate>29.97</framerate>
        <width>704</width>
        <height>480</height>
        <fix-aspect-ratio>>true</fix-aspect-ratio>
        <is-display>>false</is-display>
        <standard>ntsc</standard>
      </source>
      <source name="graphics2" type="graphics">
        <channel>2</channel>
        <input>composite</input>
        <brightness>50</brightness>
        <contrast>50</contrast>
        <saturation>50</saturation>
        <framerate>29.97</framerate>

```

```

    <width>704</width>
    <height>480</height>
    <fix-aspect-ratio>true</fix-aspect-ratio>
    <is-display>false</is-display>
    <standard>ntsc</standard>
  </source>
  <transform name="audio-archive" type="encoder">
    <input>audio</input>
    <codec>aac</codec>
    <encode-on-host>true</encode-on-host>
    <codec-parameters>
      <bitrate>128000</bitrate>
      <profile>lc</profile>
    </codec-parameters>
  </transform>
  <transform name="graphics1-archive" type="encoder">
    <input>graphics1</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>384000</bitrate>
      <max-bitrate>576000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>150</frames-per-keyframe>
    </codec-parameters>
  </transform>
  <transform name="graphics2-archive" type="encoder">
    <input>graphics2</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>1080000</bitrate>
      <max-bitrate>1624000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>150</frames-per-keyframe>
    </codec-parameters>
  </transform>
  <sink name="audio-archive-file">
    <input>audio-archive</input>
    <output>
      <type>file</type>
      <filename>audio.aac</filename>
    </output>
  </sink>
  <sink name="graphics1-archive-file">

```

```

    <input>graphics1-archive</input>
    <output>
      <type>file</type>
      <filename>video2.h264</filename>
    </output>
  </sink>
  <sink name="graphics2-archive-file">
    <input>graphics2-archive</input>
    <output>
      <type>file</type>
      <filename>video.h264</filename>
    </output>
  </sink>
</product>
</products>
</capture-profile>
<capture-profile id="3129fe56-155e-43ed-8e6f-
46201fc1b1e4">
  <name>Video Only (Podcast/Vodcast/EchoPlayer). Balanced
between file size & quality</name>
  <output-type>archive</output-type>
  <products>
    <product>
      <source name="audio" type="audio">
        <input>balanced</input>
        <mode>stereo</mode>
        <analog-gain>-6</analog-gain>
        <samplerate>44100</samplerate>
        <gain>0</gain>
        <agc>>false</agc>
      </source>
      <source name="graphics2" type="graphics">
        <channel>2</channel>
        <input>composite</input>
        <brightness>50</brightness>
        <contrast>50</contrast>
        <saturation>50</saturation>
        <framerate>29.97</framerate>
        <width>704</width>
        <height>480</height>
        <fix-aspect-ratio>>true</fix-aspect-ratio>
        <is-display>>false</is-display>
        <standard>ntsc</standard>
      </source>
      <transform name="audio-archive" type="encoder">

```

```

    <input>audio</input>
    <codec>aac</codec>
    <encode-on-host>true</encode-on-host>
    <codec-parameters>
      <bitrate>128000</bitrate>
      <profile>lc</profile>
    </codec-parameters>
  </transform>
  <transform name="graphics2-archive" type="encoder">
    <input>graphics2</input>
    <codec>h264</codec>
    <codec-parameters>
      <bitrate-control>vbr</bitrate-control>
      <bitrate>1056000</bitrate>
      <max-bitrate>1584000</max-bitrate>
      <profile>base</profile>
      <frames-per-keyframe>150</frames-per-keyframe>
    </codec-parameters>
  </transform>
  <sink name="audio-archive-file">
    <input>audio-archive</input>
    <output>
      <type>file</type>
      <filename>audio.aac</filename>
    </output>
  </sink>
  <sink name="graphics2-archive-file">
    <input>graphics2-archive</input>
    <output>
      <type>file</type>
      <filename>video.h264</filename>
    </output>
  </sink>
</product>
</products>
</capture-profile>
</capture-profiles>
</default-parameters>
</service>
<service>
  <name>system_status</name>
  <version>5.4.39512</version>
  <command>echo_system_status</command>
  <background-service>true</background-service>
  <files>

```

```

    <file>
      <name>echo_system_status</name>
      <category>worker</category>
      <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/system_status/files/echo_system_status/linux.32/x86/5.4
.39512/SHA-
256%3A012290d73a057900a953a8ae3136d118086aecea99ccadd1ce51924f45d23
0ca?time={seconds}&signature={hmac}</uri>
      <hash>SHA-
256:012290d73a057900a953a8ae3136d118086aecea99ccadd1ce51924f45d230c
a</hash>
    </file>
  </files>
  <wakeup-interval>300</wakeup-interval>
  <priority>low</priority>
</service>
<service>
  <name>upload_content</name>
  <version>5.4.39512</version>
  <command>echo_upload_content</command>
  <background-service>true</background-service>
  <files>
    <file>
      <name>echo_upload_content</name>
      <category>worker</category>
      <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/upload_content/files/echo_upload_content/linux.32/x86/5
.4.39512/SHA-
256%3Ac3a35039310ca5e9031e4e6dd779695e0788efe7ff8b1ea41b79bf2522179
357?time={seconds}&signature={hmac}</uri>
      <hash>SHA-
256:c3a35039310ca5e9031e4e6dd779695e0788efe7ff8b1ea41b79bf252217935
7</hash>
    </file>
  </files>
  <max-bytes-per-sec>2147483647</max-bytes-per-sec>
  <uri>sftp://ftpuserone:5a633fc2ab7ccc763767380ecac4f62d@appl-
ess1.echo360.local:8022/content/00-1c-08-00-14-04/{taskId}</uri>
  <reupload-
uri>sftp://ftpuserone:5a633fc2ab7ccc763767380ecac4f62d@appl-
ess1.echo360.local:8022/reuploaded/00-1c-08-00-14-
04/{taskId}</reupload-uri>
  <max-saved-size>120000</max-saved-size>

```

```

    <priority>low</priority>
  </service>
  <service>
    <name>upload_log</name>
    <version>5.4.39512</version>
    <command>echo_upload_log</command>
    <background-service>true</background-service>
    <files>
      <file>
        <name>echo_upload_log</name>
        <category>worker</category>
        <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/upload_log/files/echo_upload_log/linux.32/x86/5.4.39512
/SHA-
256%3A5323b72dc9b3847b0e222bb7b69b446d066f77fc70e9c28d6a18a85c8a06e
b51?time={seconds}&signature={hmac}</uri>
        <hash>SHA-
256:5323b72dc9b3847b0e222bb7b69b446d066f77fc70e9c28d6a18a85c8a06eb5
1</hash>
      </file>
    </files>
    <max-bytes-per-sec>2147483647</max-bytes-per-sec>
    <uri>sftp://ftpuserone:5a633fc2ab7ccc763767380ecac4f62d@appl-
ess1.echo360.local:8022/logs/00-1c-08-00-14-04/{timestamp}</uri>
    <priority>low</priority>
    <wakeup-interval>300</wakeup-interval>
    <max-saved-size>200</max-saved-size>
  </service>
  <service>
    <name>task_manager</name>
    <version>5.4.39512</version>
    <command>echo_task_manager</command>
    <background-service>true</background-service>
    <files>
      <file>
        <name>echo_task_manager</name>
        <category>system-worker</category>
        <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/task_manager/files/echo_task_manager/linux.32/x86/5.4.3
9512/SHA-
256%3A6e129b773a2647e45c9d7a2a44d5987703d80182ff31749759df3a8fd43a0
549?time={seconds}&signature={hmac}</uri>

```

```

    <hash>SHA-
256:6e129b773a2647e45c9d7a2a44d5987703d80182ff31749759df3a8fd43a054
9</hash>
  </file>
  <file>
    <name>device_client.pem</name>
    <category>static-config</category>
    <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/task_manager/files/device_client.pem/linux.32/x86/5.4.3
9512/SHA-
256%3A335a8e9941cd63961d7b7a2800934eafe2e9e9c5efba48d7c06ece36dc6d2
751?time={seconds}&signature={hmac}</uri>
    <hash>SHA-
256:335a8e9941cd63961d7b7a2800934eafe2e9e9c5efba48d7c06ece36dc6d275
1</hash>
  </file>
  <file>
    <name>new_firmware.zip</name>
    <category>dynamic-config</category>
    <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/task_manager/files/new_firmware.zip/linux.32/x86/5.4.39
512/SHA-
256%3Ad9d1a9de890097c2f4bb4357530cf8d1fc12f24a0130ceb9441ad5d11e91c
a5d?time={seconds}&signature={hmac}</uri>
    <hash>SHA-
256:d9d1a9de890097c2f4bb4357530cf8d1fc12f24a0130ceb9441ad5d11e91ca5
d</hash>
  </file>
  <file>
    <name>tasks.xml</name>
    <category>dynamic-config</category>
    <uri>https://appl-
ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
04/services/task_manager/files/tasks.xml/linux.32/x86/latest/{hash}
?time={seconds}&signature={hmac}</uri>
    <hash-on-status>true</hash-on-status>
  </file>
  <file>
    <name>device.xml</name>
    <category>static-config</category>

```

```

    <uri>https://appl-
    ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
    04/services/task_manager/files/device.xml/linux.32/x86/latest/{hash
    }?time={seconds}&signature={hmac}</uri>
    <hash-on-status>true</hash-on-status>
  </file>
</files>
  <status-uri>https://appl-
  ess1.echo360.local:8443/ess/restapi/v1/devices/00-1c-08-00-14-
  04/status?time={seconds}&signature={hmac}</status-uri>
  <status-interval>25</status-interval>
  <status-failure-interval>60</status-failure-interval>
  <prestart-time>3</prestart-time>
  <preroll-time>300</preroll-time>
  <stopping-time>1</stopping-time>
</service>
</services>

<signature>HmacSHA256:2c1a7248fe47b19d54d635390896b76bd9afc37efc18f
6e50e6c68b98c47c9d1</signature>
</device>

```

Get Device Processes Response XML

The below is the Response XML from the call defined in [section 3.2.9 - Get Device Processes](#) of this document.

```

<head><meta http-equiv="refresh" content="5"></head><pre>top -
17:22:13 up 12 min,  0 users,  load average: 0.02, 0.51, 0.80
Tasks: 111 total,   1 running, 109 sleeping,   0 stopped,   1
zombie
Cpu(s):  2.0%us,   2.7%sy,   1.0%ni, 93.7%id,   0.5%wa,   0.0%hi,
0.0%si,   0.0%st
Mem:   894484k total,   190728k used,   703756k free,   3300k
buffers
Swap: 2097148k total,         0k used, 2097148k free, 134496k
cached

  PID USER      PR  NI  VIRT  RES  SHR  S  %CPU  %MEM    TIME+
COMMAND
24567 root        30   10 2568 1052  804  R   2    0.1   0:00.01 top
    1 root        20    0 1744  588  516  S   0    0.1   0:04.67 init
    2 root        20    0    0    0    0  S   0    0.0   0:00.00
kthreadd

```

3 root	20	0	0	0	0 S	0	0.0	0:00.00	
ksoftirqd/0									
4 root	RT	0	0	0	0 S	0	0.0	0:00.03	
migration/0									
5 root	RT	0	0	0	0 S	0	0.0	0:00.00	
watchdog/0									
6 root	RT	0	0	0	0 S	0	0.0	0:00.03	
migration/1									
7 root	20	0	0	0	0 S	0	0.0	0:00.00	
ksoftirqd/1									
8 root	RT	0	0	0	0 S	0	0.0	0:00.00	
watchdog/1									
9 root	20	0	0	0	0 S	0	0.0	0:00.02	
events/0									
10 root	20	0	0	0	0 S	0	0.0	0:00.04	
events/1									
11 root	20	0	0	0	0 S	0	0.0	0:00.03	
khelper									
16 root	20	0	0	0	0 S	0	0.0	0:00.00	
async/mgr									
142 root	20	0	0	0	0 S	0	0.0	0:00.00	
sync_supers									
144 root	20	0	0	0	0 S	0	0.0	0:00.00	bdi-
default									
146 root	20	0	0	0	0 S	0	0.0	0:00.00	
kblockd/0									
147 root	20	0	0	0	0 S	0	0.0	0:00.03	
kblockd/1									
150 root	20	0	0	0	0 S	0	0.0	0:00.00	kacpid
151 root	20	0	0	0	0 S	0	0.0	0:00.01	
kacpi_notify									
152 root	20	0	0	0	0 S	0	0.0	0:00.00	
kacpi_hotplug									
249 root	20	0	0	0	0 S	0	0.0	0:00.00	khubd
252 root	20	0	0	0	0 S	0	0.0	0:00.01	
kseriod									
281 root	20	0	0	0	0 S	0	0.0	0:00.00	
rpciod/0									
282 root	20	0	0	0	0 S	0	0.0	0:00.00	
rpciod/1									
306 root	20	0	0	0	0 S	0	0.0	0:00.00	
khungtaskd									
307 root	20	0	0	0	0 S	0	0.0	0:00.00	
kswapd0									
308 root	20	0	0	0	0 S	0	0.0	0:00.00	aio/0

309	root	20	0	0	0	0	S	0	0.0	0:00.00	aio/1
310	root	20	0	0	0	0	S	0	0.0	0:00.00	nfsiod
311	root	20	0	0	0	0	S	0	0.0	0:00.00	
xfs_mru_cache											
312	root	20	0	0	0	0	S	0	0.0	0:00.02	
xfslogd/0											
313	root	20	0	0	0	0	S	0	0.0	0:00.00	
xfslogd/1											
314	root	20	0	0	0	0	S	0	0.0	0:00.01	
xfsdatad/0											
315	root	20	0	0	0	0	S	0	0.0	0:00.00	
xfsdatad/1											
316	root	20	0	0	0	0	S	0	0.0	0:00.00	
xfsconvertd/0											
317	root	20	0	0	0	0	S	0	0.0	0:00.00	
xfsconvertd/1											
318	root	20	0	0	0	0	S	0	0.0	0:00.00	
crypto/0											
319	root	20	0	0	0	0	S	0	0.0	0:00.00	
crypto/1											
508	root	20	0	0	0	0	S	0	0.0	0:00.00	
iscsi_ah											
539	root	20	0	0	0	0	S	0	0.0	0:00.00	
kpsmouse											
1102	root	20	0	0	0	0	S	0	0.0	0:00.00	
ata_aux											
1103	root	20	0	0	0	0	S	0	0.0	0:00.00	
ata_sff/0											
1104	root	20	0	0	0	0	S	0	0.0	0:00.00	
ata_sff/1											
4314	root	20	0	0	0	0	S	0	0.0	0:00.00	
scsi_ah_0											
4317	root	20	0	0	0	0	S	0	0.0	0:00.00	
scsi_ah_1											
6694	root	20	0	0	0	0	S	0	0.0	0:00.00	
scsi_tgt/0											
6695	root	20	0	0	0	0	S	0	0.0	0:00.00	
scsi_tgt/1											
7300	root	20	0	0	0	0	S	0	0.0	0:00.00	
cciss_scan											
9390	root	20	0	0	0	0	S	0	0.0	0:00.00	
usbhid_resumer											
9664	root	20	0	0	0	0	S	0	0.0	0:00.00	
khpsbpkt											

10233	root	20	0	0	0	0	S	0	0.0	0:00.00	
kstripped											
10857	root	20	0	0	0	0	S	0	0.0	0:00.00	knapd
12080	root	20	0	0	0	0	S	0	0.0	0:00.00	jfsIO
12081	root	20	0	0	0	0	S	0	0.0	0:00.00	
jfsCommit											
12082	root	20	0	0	0	0	S	0	0.0	0:00.00	
jfsCommit											
12083	root	20	0	0	0	0	S	0	0.0	0:00.00	
jfsSync											
12755	root	20	0	0	0	0	S	0	0.0	0:00.00	
kjournald											
12848	root	16	-4	2168	896	532	S	0	0.1	0:00.21	udev
18362	root	20	0	0	0	0	S	0	0.0	0:00.00	flush-
8:0											
18948	root	20	0	0	0	0	S	0	0.0	0:00.02	
kjournald											
19361	root	20	0	2984	1240	1056	S	0	0.1	0:00.30	gb-
console.sh											
19876	root	20	0	1904	708	576	S	0	0.1	0:00.08	
syslogd											
19887	root	20	0	1744	404	328	S	0	0.0	0:00.02	klogd
20970	root	20	0	1768	388	308	S	0	0.0	0:00.01	
ifplugd											
21101	bin	20	0	1764	476	388	S	0	0.1	0:00.00	
portmap											
21520	nobody	20	0	1832	700	600	S	0	0.1	0:00.00	
rpc.statd											
21587	root	20	0	2028	824	636	S	0	0.1	0:00.00	
rpc.mountd											
21589	root	20	0	0	0	0	S	0	0.0	0:00.00	lockd
21590	root	20	0	0	0	0	S	0	0.0	0:00.00	nfsd
21591	root	20	0	0	0	0	S	0	0.0	0:00.00	nfsd
21592	root	20	0	0	0	0	S	0	0.0	0:00.00	nfsd
21593	root	20	0	0	0	0	S	0	0.0	0:00.00	nfsd
21594	root	20	0	0	0	0	S	0	0.0	0:00.00	nfsd
21595	root	20	0	0	0	0	S	0	0.0	0:00.00	nfsd
21596	root	20	0	0	0	0	S	0	0.0	0:00.00	nfsd
21597	root	20	0	0	0	0	S	0	0.0	0:00.00	nfsd
21997	root	20	0	2032	728	588	S	0	0.1	0:00.00	cron
22278	root	20	0	1964	372	216	S	0	0.0	0:00.00	dhcpcd
22628	root	20	0	4076	920	616	S	0	0.1	0:00.00	sshd
22675	root	20	0	0	0	0	S	0	0.0	0:00.00	sysfsd
22708	root	20	0	2832	792	688	S	0	0.1	0:00.00	
tun_pci											

22709	root	20	0	2832	544	460	S	0	0.1	0:00.00	
tun_pci											
22710	root	20	0	3096	992	856	S	0	0.1	0:00.00	
timesync											
23011	root	20	0	2956	780	676	S	0	0.1	0:00.00	
armMonitor											
23014	root	20	0	0	0	0	S	0	0.0	0:00.00	
xfsbufd/sda4											
23016	root	20	0	0	0	0	S	0	0.0	0:00.00	
xfsaild/sda4											
23017	root	20	0	0	0	0	S	0	0.0	0:00.00	
xfssyncd/sda4											
23030	root	20	0	4552	1624	1316	S	0	0.2	0:00.02	
echo_spinner											
23042	root	20	0	1900	784	668	S	0	0.1	0:00.00	agetty
23043	root	20	0	1900	784	668	S	0	0.1	0:00.00	agetty
23044	root	20	0	1900	780	668	S	0	0.1	0:00.00	agetty
23045	root	20	0	1900	776	668	S	0	0.1	0:00.00	agetty
23046	root	20	0	1900	780	668	S	0	0.1	0:00.00	agetty
23047	root	20	0	1900	780	668	S	0	0.1	0:00.00	agetty
23048	root	20	0	6576	3812	2836	S	0	0.4	0:07.05	
echo_task_manag											
23090	root	20	0	0	0	0	Z	0	0.0	0:00.00	ntpd
<defunct>											
23092	root	20	0	4136	1176	876	S	0	0.1	0:00.02	ntpd
23104	root	30	10	5728	2852	2340	S	0	0.3	0:03.94	
echo_adhoc_cont											
23106	root	30	10	4648	1844	1512	S	0	0.2	0:07.80	
echo_system_sta											
23108	root	30	10	5340	1800	1472	S	0	0.2	0:00.14	
echo_upload_con											
23112	root	30	10	5488	2528	2148	S	0	0.3	0:00.30	
echo_upload_log											
23151	root	18	-2	2308	796	288	S	0	0.1	0:00.00	udev
23152	root	18	-2	2308	796	288	S	0	0.1	0:00.00	udev
23966	root	30	10	8156	3696	2260	S	0	0.4	0:00.98	
echo_restapi											
23967	root	30	10	8156	3696	2260	S	0	0.4	0:01.04	
echo_restapi											
23968	root	30	10	8236	3840	2316	S	0	0.4	0:00.99	
echo_restapi											
23969	root	30	10	8156	3708	2272	S	0	0.4	0:01.02	
echo_restapi											
23970	root	30	10	8156	3476	2072	S	0	0.4	0:00.15	
echo_restapi											

```
23973 root      30   10  4228 1880 1544 S    0   0.2   0:00.00
echo_nginx
23974 root      30   10  4564 1936 1288 S    0   0.2   0:07.09
echo_nginx
24568 root      20    0  1732   244  196 S    0   0.0   0:00.00 sleep
</pre>
```

Get Device Message Buffer Response XML

The below is the Response XML from the call defined in [section 3.2.10 - Get Device Message Buffer](#) of this document.

```
<pre>ci 0000:00:1e.0:  bridge window [io  0x0d00-0xffff]
(subtractive decode)
pci 0000:00:1e.0:  bridge window [mem 0x000a0000-0x000bffff]
(subtractive decode)
pci 0000:00:1e.0:  bridge window [mem 0x000d0000-0x000dffff]
(subtractive decode)
pci 0000:00:1e.0:  bridge window [mem 0x3f800000-0xdfffffff]
(subtractive decode)
pci 0000:00:1e.0:  bridge window [mem 0xe4000000-0xfed8ffff]
(subtractive decode)
pci_bus 0000:00: on NUMA node 0
ACPI: PCI Interrupt Routing Table [\_SB_.PCI0._PRT]
ACPI: PCI Interrupt Routing Table [\_SB_.PCI0.P0P1._PRT]
ACPI: PCI Interrupt Routing Table [\_SB_.PCI0.P0P4._PRT]
ACPI: PCI Interrupt Routing Table [\_SB_.PCI0.P0P7._PRT]
ACPI: PCI Interrupt Link [LNKA] (IRQs *10)
ACPI: PCI Interrupt Link [LNKB] (IRQs *3)
ACPI: PCI Interrupt Link [LNKC] (IRQs *5)
ACPI: PCI Interrupt Link [LNKD] (IRQs *11)
ACPI: Invalid _PRS IRQ 0
ACPI: PCI Interrupt Link [LNKE] (IRQs) *0, disabled.
ACPI: PCI Interrupt Link [LNKF] (IRQs *7)
ACPI: PCI Interrupt Link [LNKG] (IRQs *4)
ACPI: PCI Interrupt Link [LNKH] (IRQs *12)
vgaarb: device added:
PCI:0000:00:02.0,decodes=io+mem,owns=io+mem,locks=none
vgaarb: loaded
SCSI subsystem initialized
usbcore: registered new interface driver usbfs
usbcore: registered new interface driver hub
usbcore: registered new device driver usb
PCI: Using ACPI for IRQ routing
```

```
PCI: pci_cache_line_size set to 64 bytes
Expanded resource reserved due to conflict with PCI Bus 0000:00
reserve RAM buffer: 000000000009fc00 - 000000000009ffff
reserve RAM buffer: 000000003f7c0000 - 000000003fffffff
hpet clockevent registered
Switching to clocksource tsc
pnp: PnP ACPI init
ACPI: bus type pnp registered
pnp: PnP ACPI: found 12 devices
ACPI: ACPI bus type pnp unregistered
system 00:01: [mem 0xfed13000-0xfed19fff] has been reserved
system 00:06: [io 0x04d0-0x04d1] has been reserved
system 00:06: [io 0x0800-0x087f] has been reserved
system 00:06: [io 0x0480-0x04bf] has been reserved
system 00:06: [mem 0xfed1c000-0xfed1ffff] has been reserved
system 00:06: [mem 0xfed20000-0xfed3ffff] has been reserved
system 00:06: [mem 0xfed40000-0xfed8ffff] has been reserved
system 00:09: [mem 0xfec00000-0xfec00fff] could not be reserved
system 00:09: [mem 0xfec00000-0xfec00fff] has been reserved
system 00:0a: [mem 0xe0000000-0xe3ffffff] has been reserved
system 00:0b: [mem 0x00000000-0x0009ffff] could not be reserved
system 00:0b: [mem 0x000c0000-0x000cffff] could not be reserved
system 00:0b: [mem 0x000e0000-0x000fffff] could not be reserved
system 00:0b: [mem 0x00100000-0x3f7ffffff] could not be reserved
system 00:0b: [mem 0xfed90000-0xffffffff] could not be reserved
pci 0000:00:1c.0: BAR 8: assigned [mem 0x3f800000-0x3f9ffffff]
pci 0000:00:1c.0: BAR 9: assigned [mem 0x3fa00000-0x3fbffffff 64bit
pref]
pci 0000:00:1c.0: BAR 7: assigned [io 0x1000-0x1fff]
pci 0000:00:1c.0: PCI bridge to [bus 01-01]
pci 0000:00:1c.0: bridge window [io 0x1000-0x1fff]
pci 0000:00:1c.0: bridge window [mem 0x3f800000-0x3f9ffffff]
pci 0000:00:1c.0: bridge window [mem 0x3fa00000-0x3fbffffff 64bit
pref]
pci 0000:00:1c.3: PCI bridge to [bus 02-02]
pci 0000:00:1c.3: bridge window [io 0xe000-0xefff]
pci 0000:00:1c.3: bridge window [mem 0xfdf00000-0xfdfffffff]
pci 0000:00:1c.3: bridge window [mem 0xfa700000-0xfa7ffffff 64bit
pref]
pci 0000:00:1e.0: PCI bridge to [bus 03-03]
pci 0000:00:1e.0: bridge window [io disabled]
pci 0000:00:1e.0: bridge window [mem 0xfe000000-0xfebffffff]
pci 0000:00:1e.0: bridge window [mem 0xfa800000-0xfcffffff 64bit
pref]
pci 0000:00:1c.0: enabling device (0104 -> 0107)
```

```

pci 0000:00:1c.0: PCI INT A -> GSI 16 (level, low) -> IRQ 16
pci 0000:00:1c.0: setting latency timer to 64
pci 0000:00:1c.3: PCI INT D -> GSI 19 (level, low) -> IRQ 19
pci 0000:00:1c.3: setting latency timer to 64
pci 0000:00:1e.0: setting latency timer to 64
pci_bus 0000:00: resource 4 [io 0x0000-0x0cf7]
pci_bus 0000:00: resource 5 [io 0x0d00-0xffff]
pci_bus 0000:00: resource 6 [mem 0x000a0000-0x000bffff]
pci_bus 0000:00: resource 7 [mem 0x000d0000-0x000dffff]
pci_bus 0000:00: resource 8 [mem 0x3f800000-0xdfffffff]
pci_bus 0000:00: resource 9 [mem 0xe4000000-0xfed8ffff]
pci_bus 0000:01: resource 0 [io 0x1000-0x1fff]
pci_bus 0000:01: resource 1 [mem 0x3f800000-0x3f9fffff]
pci_bus 0000:01: resource 2 [mem 0x3fa00000-0x3fbfffff 64bit pref]
pci_bus 0000:02: resource 0 [io 0xe000-0xefff]
pci_bus 0000:02: resource 1 [mem 0xfd000000-0xfdffffff]
pci_bus 0000:02: resource 2 [mem 0xfa700000-0xfa7fffff 64bit pref]
pci_bus 0000:03: resource 1 [mem 0xfe000000-0xfebfffff]
pci_bus 0000:03: resource 2 [mem 0xfa800000-0xfcffffff 64bit pref]
pci_bus 0000:03: resource 4 [io 0x0000-0x0cf7]
pci_bus 0000:03: resource 5 [io 0x0d00-0xffff]
pci_bus 0000:03: resource 6 [mem 0x000a0000-0x000bffff]
pci_bus 0000:03: resource 7 [mem 0x000d0000-0x000dffff]
pci_bus 0000:03: resource 8 [mem 0x3f800000-0xdfffffff]
pci_bus 0000:03: resource 9 [mem 0xe4000000-0xfed8ffff]
NET: Registered protocol family 2
IP route cache hash table entries: 32768 (order: 5, 131072 bytes)
TCP established hash table entries: 131072 (order: 8, 1048576
bytes)
TCP bind hash table entries: 65536 (order: 7, 524288 bytes)
TCP: Hash tables configured (established 131072 bind 65536)
TCP reno registered
UDP hash table entries: 512 (order: 2, 16384 bytes)
UDP-Lite hash table entries: 512 (order: 2, 16384 bytes)
NET: Registered protocol family 1
RPC: Registered udp transport module.
RPC: Registered tcp transport module.
RPC: Registered tcp NFSv4.1 backchannel transport module.
pci 0000:00:02.0: Boot video device
PCI: CLS 32 bytes, default 64
Trying to unpack rootfs image as initramfs...
Freeing initrd memory: 2724k freed
bigphysarea: Allocated 32768 pages at 0xc220c000.
highmem bounce pool size: 64 pages
VFS: Disk quotas dquot_6.5.2

```

```
Dquot-cache hash table entries: 1024 (order 0, 4096 bytes)
squashfs: version 4.0 (2009/01/31) Phillip Lougher
Installing knfsd (copyright (C) 1996 okir@monad.swb.de).
NTFS driver 2.1.29 [Flags: R/O].
SGI XFS with ACLs, security attributes, realtime, large block/inode
numbers, no debug enabled
SGI XFS Quota Management subsystem
msgmni has been set to 1490
alg: No test for stdrng (krng)
Block layer SCSI generic (bsg) driver version 0.4 loaded (major
254)
io scheduler noop registered
io scheduler deadline registered (default)
pcieport 0000:00:1c.0: setting latency timer to 64
pcieport 0000:00:1c.3: setting latency timer to 64
intel_rng: FWH not detected
Linux agpgart interface v0.103
Serial: 8250/16550 driver, 4 ports, IRQ sharing enabled
brd: module loaded
loop: module loaded
Uniform Multi-Platform E-IDE driver
ide_generic: please use "probe_mask=0x3f" module parameter for
probing all legacy ISA IDE ports
ide-gd driver 1.18
ide-cd driver 5.00
Loading iSCSI transport class v2.0-870.
iscsi: registered transport (tcp)
SCSI Media Changer driver v0.25
Atheros(R) L2 Ethernet Driver - version 2.2.3
Copyright (c) 2007 Atheros Corporation.
jme: JMicron JMC2XX ethernet driver version 1.0.6
aoe: AoE v47 initialised.
usbcore: registered new interface driver usbserial
USB Serial support registered for generic
usbcore: registered new interface driver usbserial_generic
usbserial: USB Serial Driver core
USB Serial support registered for pl2303
usbcore: registered new interface driver pl2303
pl2303: Prolific PL2303 USB to serial adaptor driver
PNP: No PS/2 controller found. Probing ports directly.
Failed to disable AUX port, but continuing anyway... Is this a SiS?
If AUX port is really absent please use the 'i8042.noaux' option.
serio: i8042 KBD port at 0x60,0x64 irq 1
mice: PS/2 mouse device common for all mice
i2c /dev entries driver
```

```
i2c-core: driver [dev_driver] registered
cpuidle: using governor ladder
ioatdma: Intel(R) QuickData Technology Driver 4.00
TCP cubic registered
NET: Registered protocol family 17
Using IPI Shortcut mode
Freeing unused kernel memory: 376k freed
Write protecting the kernel text: 3392k
Write protecting the kernel read-only data: 1156k
libata version 3.00 loaded.
Error: Driver 'pata_platform' is already registered, aborting...
ata_piix 0000:00:1f.2: version 2.13
ata_piix 0000:00:1f.2: PCI INT B -> GSI 19 (level, low) -> IRQ 19
ata_piix 0000:00:1f.2: MAP [ P0 P2 IDE IDE ]
ata_piix 0000:00:1f.2: setting latency timer to 64
scsi0 : ata_piix
scsi1 : ata_piix
ata1: SATA max UDMA/133 cmd 0x1f0 ctl 0x3f6 bmdma 0xffa0 irq 14
ata2: PATA max UDMA/100 cmd 0x170 ctl 0x376 bmdma 0xffa8 irq 15
ata1.00: ATA-8: WDC WD5000AVDS-73U7B1, 01.00A01, max UDMA/133
ata1.00: 976773168 sectors, multi 16: LBA48 NCQ (depth 0/32)
ata1.00: configured for UDMA/133
scsi 0:0:0:0: Direct-Access      ATA          WDC WD5000AVDS-7 01.0 PQ:
0 ANSI: 5
sd 0:0:0:0: [sda] 976773168 512-byte logical blocks: (500 GB/465
GiB)
sd 0:0:0:0: [sda] Write Protect is off
sd 0:0:0:0: [sda] Mode Sense: 00 3a 00 00
sd 0:0:0:0: [sda] Write cache: enabled, read cache: enabled,
doesn't support DPO or FUA
 sda: sda1 sda2 sda3 sda4
sd 0:0:0:0: [sda] Attached SCSI disk
sd 0:0:0:0: Attached scsi generic sg0 type 0
scsi: <fdomain> Detection failed (no card)
GDT-HA: Storage RAID Controller Driver. Version: 3.05
Fusion MPT base driver 3.04.15
Copyright (c) 1999-2008 LSI Corporation
Fusion MPT SPI Host driver 3.04.15
Fusion MPT FC Host driver 3.04.15
Fusion MPT SAS Host driver 3.04.15
3ware Storage Controller device driver for Linux v1.26.02.003.
3ware 9000 Storage Controller device driver for Linux v2.26.02.014.
Compaq SMART2 Driver (v 2.6.0)
HP CISS Driver (v 3.6.20)
Adaptec aacraid driver 1.1-5[26400]-ms
```

```
megaraid cmm: 2.20.2.7 (Release Date: Sun Jul 16 00:01:03 EST 2006)
megaraid: 2.20.5.1 (Release Date: Thu Nov 16 15:32:35 EST 2006)
megasas: 00.00.04.17.1-rc1 Thu. Oct. 29, 11:41:51 PST 2009
QLogic Fibre Channel HBA Driver: 8.03.02-k2
Emulex LightPulse Fibre Channel SCSI driver 8.3.12
Copyright(c) 2004-2009 Emulex. All rights reserved.
aic94xx: Adaptec aic94xx SAS/SATA driver version 1.0.3 loaded
ehci_hcd: USB 2.0 'Enhanced' Host Controller (EHCI) Driver
ehci_hcd 0000:00:1d.7: PCI INT A -> GSI 23 (level, low) -> IRQ 23
ehci_hcd 0000:00:1d.7: setting latency timer to 64
ehci_hcd 0000:00:1d.7: EHCI Host Controller
ehci_hcd 0000:00:1d.7: new USB bus registered, assigned bus number
1
ehci_hcd 0000:00:1d.7: using broken periodic workaround
ehci_hcd 0000:00:1d.7: debug port 1
ehci_hcd 0000:00:1d.7: cache line size of 32 is not supported
ehci_hcd 0000:00:1d.7: irq 23, io mem 0xfde3bc00
ehci_hcd 0000:00:1d.7: USB 2.0 started, EHCI 1.00
usb usb1: New USB device found, idVendor=1d6b, idProduct=0002
usb usb1: New USB device strings: Mfr=3, Product=2, SerialNumber=1
usb usb1: Product: EHCI Host Controller
usb usb1: Manufacturer: Linux 2.6.35-gentoo-r4 ehci_hcd
usb usb1: SerialNumber: 0000:00:1d.7
hub 1-0:1.0: USB hub found
hub 1-0:1.0: 8 ports detected
Initializing USB Mass Storage driver...
usbcore: registered new interface driver usb-storage
USB Mass Storage support registered.
uhci_hcd: USB Universal Host Controller Interface driver
uhci_hcd 0000:00:1d.0: PCI INT A -> GSI 23 (level, low) -> IRQ 23
uhci_hcd 0000:00:1d.0: setting latency timer to 64
uhci_hcd 0000:00:1d.0: UHCI Host Controller
uhci_hcd 0000:00:1d.0: new USB bus registered, assigned bus number
2
uhci_hcd 0000:00:1d.0: irq 23, io base 0x0000d880
usb usb2: New USB device found, idVendor=1d6b, idProduct=0001
usb usb2: New USB device strings: Mfr=3, Product=2, SerialNumber=1
usb usb2: Product: UHCI Host Controller
usb usb2: Manufacturer: Linux 2.6.35-gentoo-r4 uhci_hcd
usb usb2: SerialNumber: 0000:00:1d.0
hub 2-0:1.0: USB hub found
hub 2-0:1.0: 2 ports detected
uhci_hcd 0000:00:1d.1: PCI INT B -> GSI 19 (level, low) -> IRQ 19
uhci_hcd 0000:00:1d.1: setting latency timer to 64
uhci_hcd 0000:00:1d.1: UHCI Host Controller
```

```
uhci_hcd 0000:00:1d.1: new USB bus registered, assigned bus number
3
uhci_hcd 0000:00:1d.1: irq 19, io base 0x0000d800
usb usb3: New USB device found, idVendor=1d6b, idProduct=0001
usb usb3: New USB device strings: Mfr=3, Product=2, SerialNumber=1
usb usb3: Product: UHCI Host Controller
usb usb3: Manufacturer: Linux 2.6.35-gentoo-r4 uhci_hcd
usb usb3: SerialNumber: 0000:00:1d.1
hub 3-0:1.0: USB hub found
hub 3-0:1.0: 2 ports detected
uhci_hcd 0000:00:1d.2: PCI INT C -> GSI 18 (level, low) -> IRQ 18
uhci_hcd 0000:00:1d.2: setting latency timer to 64
uhci_hcd 0000:00:1d.2: UHCI Host Controller
uhci_hcd 0000:00:1d.2: new USB bus registered, assigned bus number
4
uhci_hcd 0000:00:1d.2: irq 18, io base 0x0000d480
usb usb4: New USB device found, idVendor=1d6b, idProduct=0001
usb usb4: New USB device strings: Mfr=3, Product=2, SerialNumber=1
usb usb4: Product: UHCI Host Controller
usb usb4: Manufacturer: Linux 2.6.35-gentoo-r4 uhci_hcd
usb usb4: SerialNumber: 0000:00:1d.2
hub 4-0:1.0: USB hub found
hub 4-0:1.0: 2 ports detected
uhci_hcd 0000:00:1d.3: PCI INT D -> GSI 16 (level, low) -> IRQ 16
uhci_hcd 0000:00:1d.3: setting latency timer to 64
uhci_hcd 0000:00:1d.3: UHCI Host Controller
uhci_hcd 0000:00:1d.3: new USB bus registered, assigned bus number
5
uhci_hcd 0000:00:1d.3: irq 16, io base 0x0000d400
usb usb5: New USB device found, idVendor=1d6b, idProduct=0001
usb usb5: New USB device strings: Mfr=3, Product=2, SerialNumber=1
usb usb5: Product: UHCI Host Controller
usb usb5: Manufacturer: Linux 2.6.35-gentoo-r4 uhci_hcd
usb usb5: SerialNumber: 0000:00:1d.3
hub 5-0:1.0: USB hub found
hub 5-0:1.0: 2 ports detected
ohci_hcd: USB 1.1 'Open' Host Controller (OHCI) Driver
usbcore: registered new interface driver hiddev
usbcore: registered new interface driver usbhid
usbhid: USB HID core driver
sl811: driver sl811-hcd, 19 May 2005
device-mapper: uevent: version 1.0.3
device-mapper: ioctl: 4.17.0-ioctl (2010-03-05) initialised: dm-
devel@redhat.com
md: raid0 personality registered for level 0
```

```

md: raid1 personality registered for level 1
raid6: int32x1      164 MB/s
raid6: int32x2      257 MB/s
raid6: int32x4      269 MB/s
raid6: int32x8      281 MB/s
raid6: mmxx1        359 MB/s
raid6: mmxx2        664 MB/s
raid6: sse1x1       289 MB/s
raid6: sse1x2       496 MB/s
raid6: sse2x1       574 MB/s
raid6: sse2x2       984 MB/s
raid6: using algorithm sse2x2 (984 MB/s)
async_tx: api initialized (async)
xor: automatically using best checksumming function: pIII_sse
   pIII_sse  : 4896.000 MB/sec
xor: using function: pIII_sse (4896.000 MB/sec)
md: raid6 personality registered for level 6
md: raid5 personality registered for level 5
md: raid4 personality registered for level 4
md: raid10 personality registered for level 10
JFS: nTxBLOCK = 6988, nTxLock = 55905
fuse init (API version 7.14)
e1000: Intel(R) PRO/1000 Network Driver - version 7.3.21-k6-NAPI
e1000: Copyright (c) 1999-2006 Intel Corporation.
EXT3-fs: barriers not enabled
kjournald starting. Commit interval 5 seconds
EXT3-fs (sda3): mounted filesystem with writeback data mode
udev: starting version 151
Real Time Clock Driver v1.12b
request_module: runaway loop modprobe eth0
i801_smbus 0000:00:1f.3: PCI INT B -> GSI 19 (level, low) -> IRQ 19
i801_smbus 0000:00:1f.3: SMBus using PCI Interrupt
i2c i2c-0: adapter [SMBus I801 adapter at 0400] registered
i2c-dev: adapter [SMBus I801 adapter at 0400] registered as minor 0
input: Power Button as
/devices/LNXSYSTM:00/LNXXSYBUS:00/PNP0C0C:00/input/input0
ACPI: Power Button [PWRB]
input: Power Button as
/devices/LNXSYSTM:00/LNXPWRBN:00/input/input1
ACPI: Power Button [PWRF]
r8169 Gigabit Ethernet driver 2.3LK-NAPI loaded
  
```

```

r8169 0000:02:00.0: PCI INT A -> GSI 19 (level, low) -> IRQ 19
r8169 0000:02:00.0: setting latency timer to 64
r8169 0000:02:00.0: no MSI. Back to INTx.
r8169 0000:02:00.0: eth0: RTL8168c/8111c at 0xfa3fa000,
00:1c:08:00:14:04, XID 1c2000c0 IRQ 19
ACPI: acpi_idle registered with cpuidle
Monitor-Mwait will be used to enter C-1 state
thermal LNX_THERM:01: registered as thermal_zone0
ACPI: Thermal Zone [THRM] (53 C)
Intel ICH 0000:00:1e.2: PCI INT A -> GSI 17 (level, low) -> IRQ 17
Intel ICH 0000:00:1e.2: setting latency timer to 64
AC'97 warm reset still in progress? [0x6]
Intel ICH 0000:00:1e.2: PCI INT A disabled
Intel ICH: probe of 0000:00:1e.2 failed with error -5
ACPI: AC Adapter [ADP1] (off-line)
ACPI: Fan [PFAN] (on)
EXT3-fs: barriers not enabled
kjournald starting. Commit interval 5 seconds
EXT3-fs (sda1): warning: maximal mount count reached, running
e2fsck is recommended
EXT3-fs (sda1): using internal journal
EXT3-fs (sda1): mounted filesystem with writeback data mode
NET: Registered protocol family 10
lo: Disabled Privacy Extensions
EXT3-fs (sda3): warning: maximal mount count reached, running
e2fsck is recommended
EXT3-fs (sda3): using internal journal
XFS mounting filesystem sda4
Ending clean XFS mount for filesystem: sda4
Adding 2097148k swap on /dev/sda2. Priority:-1 extents:1
across:2097148k
r8169 0000:02:00.0: eth0: link up
r8169 0000:02:00.0: eth0: link up
svc: failed to register lockd v1 RPC service (errno 97).
tun: Universal TUN/TAP device driver, 1.6
tun: (C) 1999-2004 Max Krasnyansky <maxk@qualcomm.com>
eth0: no IPv6 routers present
gbpci_init() enter, Ghostbuster model=0x0003 ====
gbpci_init() creating char drv class 'gb'
gbpci_init() registering PCI driver
gbpci_probe() 0003:04.0
gbpci_probe() 0003:04.0 is 'gb-pci0'
gbcard_add_conduit(gb-pci0,id=0
'graphics0',offset=0x00000370,size=0x00800000)

```

```

gbcard_add_conduit(gb-pci0,id=1
'graphics1',offset=0x00800380,size=0x00800000)
gbcard_add_conduit(gb-pci0,id=2
'audio',offset=0x01000390,size=0x00200000)
gbcard_add_conduit(gb-pci0,id=3
'command',offset=0x012003A0,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=4
'reply',offset=0x013003B0,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=5
'status',offset=0x014003C0,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=6
'log',offset=0x015003D0,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=7
'timesync',offset=0x016003E0,size=0x00000010)
gbcard_add_conduit(gb-pci0,id=8
'netfromhost',offset=0x01600400,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=9
'nettohost',offset=0x01700410,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=10
'ledcontrol',offset=0x01800420,size=0x00000400)
gbcard_init_as_pci_dev() enter
gbcard_init_as_pci_dev() pci_enable_device
gb 0000:03:04.0: PCI INT A -> GSI 21 (level, low) -> IRQ 21
gbcard_init_as_pci_dev() mapping 6467 BARs into kernel space
gbpci_dm646x_pci_readBars() reading and mapping dm6467 BAR
resources (cindex=0)

```

BAR Name	BaseAddr	Length	Flags
Virtual			
TCM_RAM	0xfebf8000	32768	0x00040200
	0xfa5e0000		
EMIF_REGS	0xfebf0000	32768	0x00040200
	0xfa5f0000		
CHIP_MMR	0xfe400000	4194304	0x00040200
	0xfb000000		
L2_RAM	0xfcf00000	131072	0x00042208
	0xfafc0000		
DDR2_A	0xfcf00000	8388608	0x00042208
	0xfb480000		
DDR2_B	0xfb800000	8388608	0x00042208
	0xfb000000		

```

gbpci_dm646x_pci_readBars() reading and mapping dm6467 BAR
resources (cindex=0) success
gbcard_init_as_pci_dev() request irq 21

```

```

gbcard_init_as_pci_dev() init PCI device success
init_channel_status_data() creating init channel status data for
card 0
gbpci_probe() 0003:04.0 (index=0/1) success
gbpci_probe() 0003:05.0
gbpci_probe() 0003:05.0 is 'gb-pci1'
gbcard_add_conduit(gb-pci1,id=0
'graphics0',offset=0x00000370,size=0x00800000)
gbcard_add_conduit(gb-pci1,id=1
'graphics1',offset=0x00800380,size=0x00800000)
gbcard_add_conduit(gb-pci1,id=2
'audio',offset=0x01000390,size=0x00200000)
gbcard_add_conduit(gb-pci1,id=3
'command',offset=0x012003A0,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=4
'reply',offset=0x013003B0,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=5
'status',offset=0x014003C0,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=6
'log',offset=0x015003D0,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=7
'timesync',offset=0x016003E0,size=0x00000010)
gbcard_add_conduit(gb-pci1,id=8
'netfromhost',offset=0x01600400,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=9
'nettohost',offset=0x01700410,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=10
'ledcontrol',offset=0x01800420,size=0x00000400)
gbcard_init_as_pci_dev() enter
gbcard_init_as_pci_dev() pci_enable_device
gb 0000:03:05.0: PCI INT A -> GSI 22 (level, low) -> IRQ 22
gbcard_init_as_pci_dev() mapping 6467 BARs into kernel space
gbpci_dm646x_pci_readBars() reading and mapping dm6467 BAR
resources (cindex=1)

```

BAR Name	BaseAddr	Length	Flags
Virtual			
TCM_RAM	0xfebe8000	32768	0x00040200
	0xfaf90000		
EMIF_REGS	0xfebe0000	32768	0x00040200
	0xfafa0000		
CHIP_MMR	0xfe000000	4194304	0x00040200
	0xfc580000		
L2_RAM	0xfcfc0000	131072	0x00042208
	0xfb440000		

```

DDR2_A  0xfb000000      |          8388608 |          0x00042208      |
0xfca00000
DDR2_B  0xfa800000      |          8388608 |          0x00042208      |
0xfd280000

gbpci_dm646x_pci_readBars() reading and mapping dm6467 BAR
resources (cindex=1) success
gbcard_init_as_pci_dev() request irq 22
gbcard_init_as_pci_dev() init PCI device success
init_channel_status_data() creating init channel status data for
card 1
gbpci_probe() 0003:05.0 (index=1/2) success
gbpci_init() ==== Ghostbuster PCI module successfully loaded ====
gbpci_remove() 0003:04.0 'gb-pci0'
gbcard_destroy_pci() destroy PCI device
gbcard_destroy_pci() remove magic info from TCM RAM
gbcard_destroy_pci() release PCI irq 21
gbcard_destroy_pci() unmapping PCI bars, releasing mem regions
gbcard_destroy_pci() disable PCI device
gb 0000:03:04.0: PCI INT A disabled
gbcard_destroy_pci() Finished destroying PCI device.
gbcard_destroy_char() maj/min/cnt=247/0/11
gbpci_remove() done; 1 cards remaining.
gbpci_remove() 0003:05.0 'gb-pci1'
gbcard_destroy_pci() destroy PCI device
gbcard_destroy_pci() remove magic info from TCM RAM
gbcard_destroy_pci() release PCI irq 22
gbcard_destroy_pci() unmapping PCI bars, releasing mem regions
gbcard_destroy_pci() disable PCI device
gb 0000:03:05.0: PCI INT A disabled
gbcard_destroy_pci() Finished destroying PCI device.
gbcard_destroy_char() maj/min/cnt=247/11/11
gbpci_remove() done; 0 cards remaining.
pci 0000:03:04.0: reg 10: [mem 0x00000000-0x00007fff]
pci 0000:03:04.0: reg 14: [mem 0x00000000-0x00007fff]
pci 0000:03:04.0: reg 18: [mem 0x00000000-0x003fffff]
pci 0000:03:04.0: reg 1c: [mem 0x00000000-0x0001ffff pref]
pci 0000:03:04.0: reg 20: [mem 0x00000000-0x007fffff pref]
pci 0000:03:04.0: reg 24: [mem 0x00000000-0x007fffff pref]
pci 0000:03:05.0: reg 10: [mem 0x00000000-0x00007fff]
pci 0000:03:05.0: reg 14: [mem 0x00000000-0x00007fff]
pci 0000:03:05.0: reg 18: [mem 0x00000000-0x003fffff]
pci 0000:03:05.0: reg 1c: [mem 0x00000000-0x0001ffff pref]
pci 0000:03:05.0: reg 20: [mem 0x00000000-0x007fffff pref]
pci 0000:03:05.0: reg 24: [mem 0x00000000-0x007fffff pref]

```

```
pci 0000:00:02.0: BAR 6: [??? 0x00000000 flags 0x2] has bogus
alignment
pci 0000:03:04.0: BAR 4: assigned [mem 0xfa800000-0xfaffffff pref]
pci 0000:03:04.0: BAR 4: set to [mem 0xfa800000-0xfaffffff pref]
(PCI address [0xfa800000-0xfaffffff])
pci 0000:03:04.0: BAR 5: assigned [mem 0xfb000000-0xfb7ffffff pref]
pci 0000:03:04.0: BAR 5: set to [mem 0xfb000000-0xfb7ffffff pref]
(PCI address [0xfb000000-0xfb7ffffff])
pci 0000:03:05.0: BAR 4: assigned [mem 0xfb800000-0xfbffffff pref]
pci 0000:03:05.0: BAR 4: set to [mem 0xfb800000-0xfbffffff pref]
(PCI address [0xfb800000-0xfbffffff])
pci 0000:03:05.0: BAR 5: assigned [mem 0xfc000000-0xfc7ffffff pref]
pci 0000:03:05.0: BAR 5: set to [mem 0xfc000000-0xfc7ffffff pref]
(PCI address [0xfc000000-0xfc7ffffff])
pci 0000:03:04.0: BAR 2: assigned [mem 0xfe000000-0xfe3ffffff]
pci 0000:03:04.0: BAR 2: set to [mem 0xfe000000-0xfe3ffffff] (PCI
address [0xfe000000-0xfe3ffffff])
pci 0000:03:05.0: BAR 2: assigned [mem 0xfe400000-0xfe7ffffff]
pci 0000:03:05.0: BAR 2: set to [mem 0xfe400000-0xfe7ffffff] (PCI
address [0xfe400000-0xfe7ffffff])
pci 0000:03:04.0: BAR 3: assigned [mem 0xfc800000-0xfc81ffff pref]
pci 0000:03:04.0: BAR 3: set to [mem 0xfc800000-0xfc81ffff pref]
(PCI address [0xfc800000-0xfc81ffff])
pci 0000:03:05.0: BAR 3: assigned [mem 0xfc820000-0xfc83ffff pref]
pci 0000:03:05.0: BAR 3: set to [mem 0xfc820000-0xfc83ffff pref]
(PCI address [0xfc820000-0xfc83ffff])
pci 0000:03:04.0: BAR 0: assigned [mem 0xfe800000-0xfe807fff]
pci 0000:03:04.0: BAR 0: set to [mem 0xfe800000-0xfe807fff] (PCI
address [0xfe800000-0xfe807fff])
pci 0000:03:04.0: BAR 1: assigned [mem 0xfe808000-0xfe80ffff]
pci 0000:03:04.0: BAR 1: set to [mem 0xfe808000-0xfe80ffff] (PCI
address [0xfe808000-0xfe80ffff])
pci 0000:03:05.0: BAR 0: assigned [mem 0xfe810000-0xfe817fff]
pci 0000:03:05.0: BAR 0: set to [mem 0xfe810000-0xfe817fff] (PCI
address [0xfe810000-0xfe817fff])
pci 0000:03:05.0: BAR 1: assigned [mem 0xfe818000-0xfe81ffff]
pci 0000:03:05.0: BAR 1: set to [mem 0xfe818000-0xfe81ffff] (PCI
address [0xfe818000-0xfe81ffff])
gbpci_probe() 0003:04.0
gbpci_probe() 0003:04.0 is 'gb-pci0'
gbcard_add_conduit(gb-pci0,id=0
'graphics0',offset=0x00000370,size=0x00800000)
gbcard_add_conduit(gb-pci0,id=1
'graphics1',offset=0x00800380,size=0x00800000)
```

```

gbcard_add_conduit(gb-pci0,id=2
'audio',offset=0x01000390,size=0x00200000)
gbcard_add_conduit(gb-pci0,id=3
'command',offset=0x012003A0,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=4
'reply',offset=0x013003B0,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=5
'status',offset=0x014003C0,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=6
'log',offset=0x015003D0,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=7
'timesync',offset=0x016003E0,size=0x00000010)
gbcard_add_conduit(gb-pci0,id=8
'netfromhost',offset=0x01600400,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=9
'nettohost',offset=0x01700410,size=0x00100000)
gbcard_add_conduit(gb-pci0,id=10
'ledcontrol',offset=0x01800420,size=0x00000400)
gbcard_init_as_pci_dev() enter
gbcard_init_as_pci_dev() pci_enable_device
gb 0000:03:04.0: enabling device (0000 -> 0002)
gb 0000:03:04.0: PCI INT A -> GSI 21 (level, low) -> IRQ 21
gb 0000:03:04.0: setting latency timer to 64
gbcard_init_as_pci_dev() mapping 6467 BARs into kernel space
gbpci_dm646x_pci_readBars() reading and mapping dm6467 BAR
resources (cindex=0)

BAR Name          BaseAddr          Length          Flags
Virtual
TCM_RAM 0xfe800000 |          32768 |          0x00040200 |
0xfafb0000
EMIF_REGS          0xfe808000 |          32768 |          0x00040200
|          0xfaff0000
CHIP_MMR          0xfe000000 |         4194304 |          0x00040200
|          0xfdb00000
L2_RAM 0xfc800000 |         131072 |          0x00042208 |
0xfbcc0000
DDR2_A 0xfa800000 |         8388608 |          0x00042208 |
0xfdf80000
DDR2_B 0xfb000000 |         8388608 |          0x00042208 |
0xfb000000

gbpci_dm646x_pci_readBars() reading and mapping dm6467 BAR
resources (cindex=0) success
gbcard_init_as_pci_dev() request irq 21

```

```

gbcard_init_as_pci_dev() init PCI device success
init_channel_status_data() creating init channel status data for
card 0
gbpci_probe() 0003:04.0 (index=0/1) success
gbpci_probe() 0003:05.0
gbpci_probe() 0003:05.0 is 'gb-pci1'
gbcard_add_conduit(gb-pci1,id=0
'graphics0',offset=0x00000370,size=0x00800000)
gbcard_add_conduit(gb-pci1,id=1
'graphics1',offset=0x00800380,size=0x00800000)
gbcard_add_conduit(gb-pci1,id=2
'audio',offset=0x01000390,size=0x00200000)
gbcard_add_conduit(gb-pci1,id=3
'command',offset=0x012003A0,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=4
'reply',offset=0x013003B0,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=5
'status',offset=0x014003C0,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=6
'log',offset=0x015003D0,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=7
'timesync',offset=0x016003E0,size=0x00000010)
gbcard_add_conduit(gb-pci1,id=8
'netfromhost',offset=0x01600400,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=9
'nettohost',offset=0x01700410,size=0x00100000)
gbcard_add_conduit(gb-pci1,id=10
'ledcontrol',offset=0x01800420,size=0x00000400)
gbcard_init_as_pci_dev() enter
gbcard_init_as_pci_dev() pci_enable_device
gb 0000:03:05.0: enabling device (0000 -> 0002)
gb 0000:03:05.0: PCI INT A -> GSI 22 (level, low) -> IRQ 22
gb 0000:03:05.0: setting latency timer to 64
gbcard_init_as_pci_dev() mapping 6467 BARs into kernel space
gbpci_dm646x_pci_readBars() reading and mapping dm6467 BAR
resources (cindex=1)

```

BAR Name	BaseAddr	Length	Flags
Virtual			
TCM_RAM	0xfe810000	32768	0x00040200
	0xf8080000		
EMIF_REGS	0xfe818000	32768	0x00040200
	0xf8090000		
CHIP_MMR	0xfe400000	4194304	0x00040200
	0xfa780000		

```

L2_RAM 0xfc820000 | 131072 | 0x00042208 |
0xf9400000
DDR2_A 0xfb800000 | 8388608 | 0x00042208 |
0xfbd00000
DDR2_B 0xfc000000 | 8388608 | 0x00042208 |
0xfc580000

gbpci_dm646x_pci_read_bars() reading and mapping dm6467 BAR
resources (cindex=1) success
gbcard_init_as_pci_dev() request irq 22
gbcard_init_as_pci_dev() init PCI device success
init_channel_status_data() creating init channel status data for
card 1
gbpci_probe() 0003:05.0 (index=1/2) success
gbpci_dm646x_pci_remap_bar() remapping bar 0 (TCM_RAM) to new
window 0x10010000 (cindex=0)
gbpci_dm646x_run_tcm_img() running UBL image at TCM offset 0x20
(cindex=0)
gbpci_dm646x_run_tcm_img() placing offset of UBL image (0x20) into
magic location 0x10017E80 (virt 0xFAFB7E80)
gbpci_dm646x_run_tcm_img() ORing 0x01 against BOOTSTAT at virt
0xFDB40010.
gbpci_dm646x_run_tcm_img() running UBL at TCM offset 0x20 (abs
0x10010020), waiting for BC clear
gbpci_dm646x_run_tcm_img() running UBL image at TCM offset 0x20
(cindex=0) success
gbpci_dm646x_pci_remap_bar() remapping bar 4 (DDR2_A) to new window
0x82000000 (cindex=0)
gbpci_dm646x_pci_remap_bar() remapping bar 4 (DDR2_A) to new window
0x8a000000 (cindex=0)
gbpci_dm646x_pci_remap_bar() remapping bar 4 (DDR2_A) to new window
0x8a800000 (cindex=0)
gbpci_dm646x_pci_remap_bar() remapping bar 4 (DDR2_A) to new window
0x89800000 (cindex=0)
gbpci_dm646x_pci_remap_bar() remapping bar 4 (DDR2_A) to new window
0x82000000 (cindex=0)
gbpci_dm646x_boot_image() booting image at location 0x89f80000
(cindex=0)
gbpci_dm646x_pci_remap_bar() remapping bar 0 (TCM_RAM) to new
window 0x10010000 (cindex=1)
gbpci_dm646x_run_tcm_img() running UBL image at TCM offset 0x20
(cindex=1)
gbpci_dm646x_run_tcm_img() placing offset of UBL image (0x20) into
magic location 0x10017E80 (virt 0xF8087E80)

```

```
gbpci_dm646x_run_tcm_img() ORing 0x01 against BOOTSTAT at virt
0xFA7C0010.
gbpci_dm646x_run_tcm_img() running UBL at TCM offset 0x20 (abs
0x10010020), waiting for BC clear
gbpci_dm646x_run_tcm_img() running UBL image at TCM offset 0x20
(cindex=1) success
gbpci_dm646x_pci_remap_bar() remapping bar 4 (DDR2_A) to new window
0x82000000 (cindex=1)
gbpci_dm646x_pci_remap_bar() remapping bar 4 (DDR2_A) to new window
0x8a000000 (cindex=1)
gbpci_dm646x_pci_remap_bar() remapping bar 4 (DDR2_A) to new window
0x8a800000 (cindex=1)
gbpci_dm646x_pci_remap_bar() remapping bar 4 (DDR2_A) to new window
0x89800000 (cindex=1)
gbpci_dm646x_pci_remap_bar() remapping bar 4 (DDR2_A) to new window
0x82000000 (cindex=1)
gbpci_dm646x_boot_image() booting image at location 0x89f80000
(cindex=1)
tun0: Disabled Privacy Extensions
tun1: Disabled Privacy Extensions
XFS mounting filesystem sda4
Ending clean XFS mount for filesystem: sda4
ip_tables: (C) 2000-2006 Netfilter Core Team
nf_conntrack version 0.5.0 (13976 buckets, 55904 max)
CONFIG_NF_CT_ACCT is deprecated and will be removed soon. Please
use
nf_conntrack.acct=1 kernel parameter, acct=1 nf_conntrack module
option or
sysctl net.netfilter.nf_conntrack_acct=1 to enable it.
</pre>
```