From: [Non-DoD Source] Fwd: Re: ACES Users Guide 1.0
Sent: Friday, June 03, 2016 6:49 AM
To: [Non-DoD Source] Fwd: Re: ACES Users Guide 1.0
Subject: ACES Users Guide 1.0.pdf
Attachments: ACES Users Guide 1.0.pdf

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

Hi is it attached now?

---------- Forwarded message ----------
From: [Non-DoD Source] Fwd: Re: ACES Users Guide 1.0
Date: Jun 2, 2016 8:45 PM
Subject: Re: ACES Users Guide 1.0

Hopefully this works for you this time.

All -- Let me know if you did not receive as well.

Thanks!

On Thu, Jun 2, 2016 at 6:39 PM, wrote:

I don't see anything attached...

On Jun 2, 2016 6:31 PM, wrote:

User's Guide 1.0 attached.
Please let me know if you have any questions or feedback we can use to improve.

I will be taking a disk into Chantilly tomorrow and on Monday [ ] will be able to fill out the transfer form so that it will be available on their network.

Thanks!

(b)(3)
(b)(6)
ACES Users Guide

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ACES: An Introduction

What Is ACES?

Advanced Collaboration Enterprise Service (ACES) is a system for enabling efficient communications and collaboration across the NRO Enterprise.

ACES is built on Photon, the core system behind the ACES system and a product of vendors TEG & Hadron Industries. In this document, references to Photon refer to the base system components that make up the ACES environment.

What Does this Guide Cover?

This user guide covers operation of the NRO implementation of ACES and its components, and basic troubleshooting procedures should they be necessary.

What Does this Guide Not Cover?

Administrative tasks, advanced system configuration, programming and customization, are not a part of this document. For consultation on these issues, please contact the vendor, TEG, directly through appropriate channels.
Basic ACES Usage

Logging Into ACES

Every ACES user utilizes a shared authentication credential. From the login screen, the ID is 'aces' and the password is 'aces'. Users must agree to the monitoring conditions as set forth in the disclaimer on the screen before authentication can occur. Logging into ACES does not provide any NRO network capabilities. For example, ACES does not provide access to NMIS e-mail natively. ACES users are still required to login to their native networks in order to access native applications such as e-mail.

Typical Use Case

The ACES Environment

By default, the ACES desktop application is running at startup. Figure 1 shows the desktop environment after login with the desktop tray zoomed in. If ACES is running, there is a Greek Gamma symbol icon in the desktop tray (circled in Fig1). This is called the photon desktop tray icon.

Typical Use Case

The typical ACES user will want to launch their native desktop feeds after logging into ACES. This is done by right clicking on the Photon icon, selecting 'Add Desktop' -> <Feed> as shown in Figure 2.

Accessing the Photon Console

The desktop feeds can be manipulated locally like normal desktop windows via resizing, dragging, etc. To move feeds to other screens, the user must access the Photon Console. This is done through a web application inside the Chromium web browser. To launch Chromium, select the start menu in the lower left of the screen and then select "Chromium Web Browser".
At the URL prompt in Chromium, type:
http://photon/
press enter and the Photon Console will be displayed. After launching all of the feeds and Chromium, the ACES desktop may be populated similar to what is shown in Figure 4:

**Figure 4: A typical ACES desktop at startup**

**Launching a Local Feed**

In some situations, a user may wish to have a feed displayed on their ACES desktop but NOT have it sharable and manipulatable in the Photon Console. This capability is provided via a "Add Local" function.

**Figure 5: Launching a local feed via the Photon icon**

By right clicking on the Photon icon, then selecting "Advanced" -> "Add Desktop (Local)" -> <FEED> a user can add a native feed to the ACES desktop but NOT to the Photon Console. This prevents other users from copying, resizing, and/or manipulating the feed.

**Unsharing a feed (making it "go blind")**

By default, all feeds are shared or "multicast" throughout the entire ACES ecosystem allowing users to share their desktop feeds.

If a user wants to unshare a feed, this is accomplished by disabling multicast for a specific feed. In order to disable a multicast feed, the user must right click the Photon icon, then select "Advanced" -> "Multicast" -> <FEED> -> "Disable" as shown below in Figure 6.

**Figure 6: Unsharing a feed**

This will make any remote display of the disabled feed go to a black screen.

Note that the feed will still be displayed and manipulatable in the Photon Console. However, its content will not display remotely.

However, this does not impact the local user's feed. The user can still launch the feed locally and work with it as before. This only impacts sharing.

To re-enable sharing, the same procedure occurs except the user selects "Restart" instead of "Disable".

**Note:** for NRO, we highly recommend staying with MJPEG compression for multicasting (i.e. do not use x264).
**Duplicate/Launch/Share an ingest**

The cornerstone of ACES is collaboration. In order to share a live feed with another operator or display:

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the Photon console &quot;Right-Click&quot; the remote video ingest you need to duplicate/share</td>
<td>The desktop view you wanted to duplicate is now visible and can then be moved to the requisite video display board</td>
</tr>
</tbody>
</table>

Figure 7: Duplication of feeds/ingests

**Create an ACES Screenshot**

Sharing dynamic feeds is one mechanism for collaborating in ACES. Additionally, static screenshot capabilities are provided to allow for sharing specific instances. From the System Tray on the bottom right side of the desktop, Right click the Photon Icon and select "Screenshot" and then select which type of screenshot to perform (see Figure 8). When "Selection" is selected, the user is presented with crosshairs to drag a rectangular region for capture.
3 Advanced ACES Usage

Moving screens in the Photon Console

By default, the Photon Console has been arranged according to user specification as shown in Figure 9. In this configuration, the Videowall screens are labeled "NROC-VW-1" through "NROC-VW-5" and the workstations are labeled "JCC-WF-A" through "JCC-WF-F". "JCC-WF-C" through "JCC-WF-F" correspond to the operator workstations against the NROC wall and the "JCC-WF-A" and "JCC-WF-B" stations correspond to the CWO stations.

The screen configuration can be changed but by default it is locked. To unlock the screen configuration in the console, select "Interaction" -> Unlock All Elements. (figure 10)

After unlocking the console elements, ACES users can move screens around the console to better reflect workflow and collaboration. Figure 11 shows a reconfigured Photon Console where "JCC-WF-D", "JCC-WF-B" and "NROC-VW-1" have been logically grouped apart from the rest of the NROC.

Note that reconfiguring screens is global to all ACES users.
Other Software

Additionally, there may be a number of software packages that are unique to your customized install which are made accessible by (but are not a part of) Photon. Examples might include:

- Office software
- Security/Classification control systems and guards
- Teleconferencing applications

4 Basic Troubleshooting Steps

Issue: The Photon Client is not present on the System Tray

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>RESULT</th>
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<tbody>
<tr>
<td>From the start menu, select &quot;Photon Client.&quot;</td>
<td>The Photon Client icon should now be present on the bottom right System Tray board</td>
</tr>
</tbody>
</table>

Issue: Unable to move content through the Photon Console

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the System Tray on the bottom right side of the desktop, right-click the Photon Icon</td>
<td>A view of options to select are available</td>
</tr>
<tr>
<td>Select &quot;Restart Photon&quot; from the menu options</td>
<td>The Photon Client has restarted and functionality should return</td>
</tr>
</tbody>
</table>
Notes