Interaction with X-Rite Device Services

June 2012

This tech note describes the use of individual instrument SDKs and their interaction with X-Rite Device Services (XRDD).

X-Rite Device Services is a dynamic software layer that provides a run-time interface between an application and an X-Rite instruments's Run Time Library (RTL, or Framework). XRDD is used by a number of X-Rite software packages to automatically establishe connections to instruments when a user starts or, switches to, an application that connects to the device. Instruments currently supported by XRDD include:

- I1Pro spectrophotometer
- I1Display 2 emissive colorimeter
- I1Display Pro emissive colorimeter
- I1/iO automatic scanning table
- I1 iSis sheet reading spectrophotometer
- ColorMunki Design and ColorMunki Photo Spectrophotometers
- ColorMunki emissive colorimeters

In most cases the hand off from X-Rite Device Services to an application built with the standard SDKs is transparent to both the application and the user.

If you experience issues with connection or measurement, particularly using extended emissive readings, follow these instructions to ensure the most robust connection with the instrument that you are supporting. Stop the i1Profiler and/or ColorMunki tray services, if running, before establishing a connection to the instrument in your software. Do **not** stop the XRDD service as this is required for the X-Rite applications to reconnect to the measurement hardware.

Under Windows, find the i1Profiler or ColorMunki icon in the tray. Right click on the appropriate icon and select **Exit** from the pull down.

You can also stop either the tray or the service from either the Activity Monitor utility on the Mac or from the Task Manager on Windows. See the following illustrations:
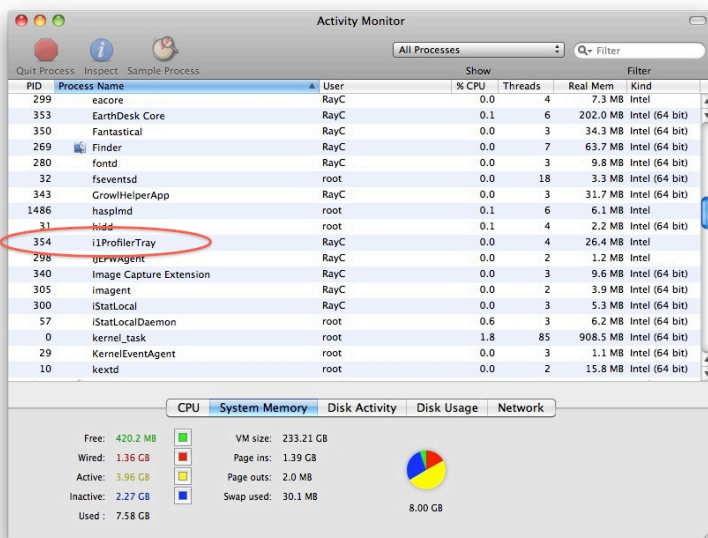
This shows the i1Profiler tray application
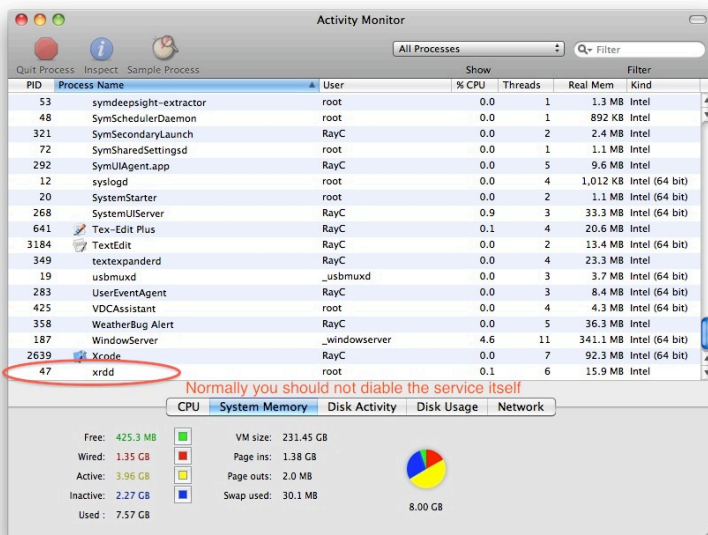
This shows the XRDD service. Normally this should NOT be disabled – but it may be useful to disable this for testing.

Windows Task Manager

File Options View Help

Applications | Processes | Performance | Networking

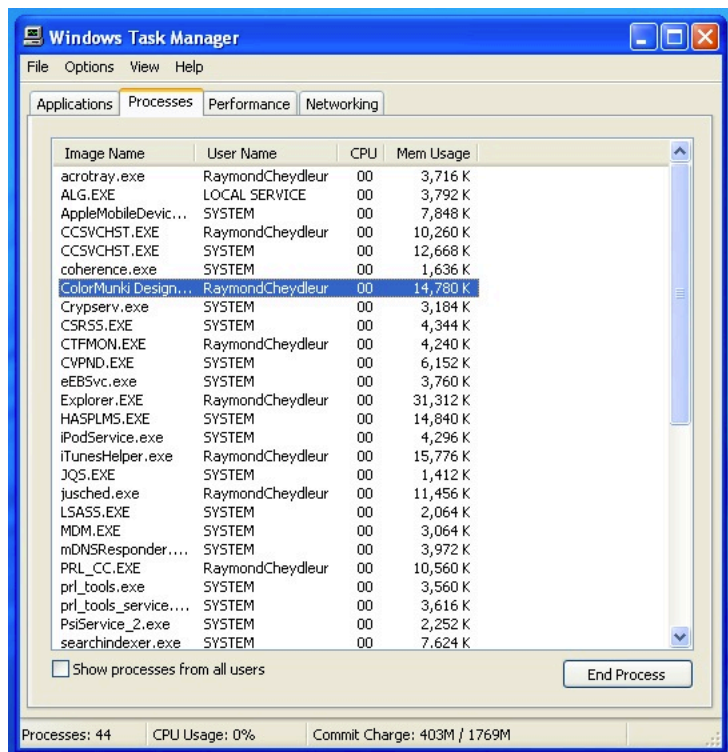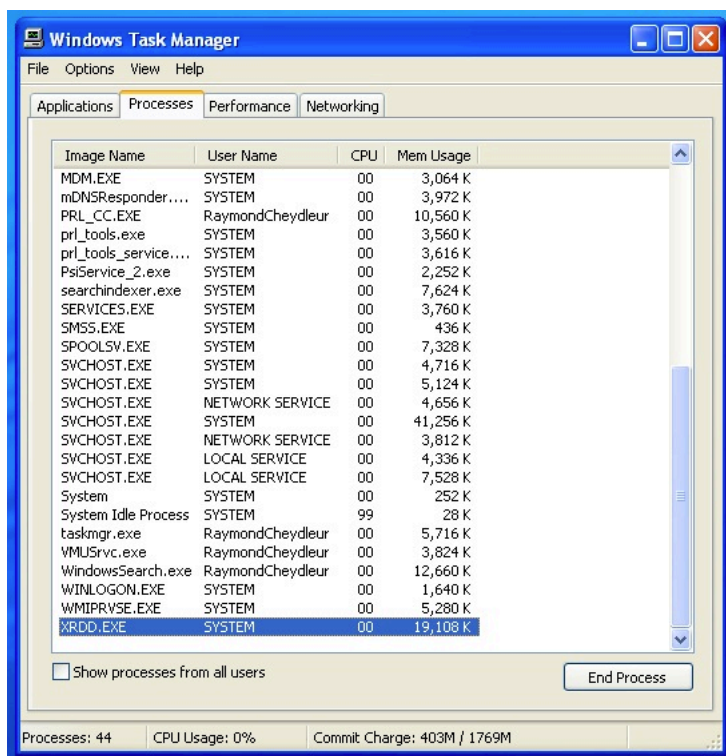| Image Name	User Name	CPU	Mem Usage
acrotray.exe	RaymondCheydleur	00	3,716 K
ALG.EXE	LOCAL SERVICE	00	3,792 K
AppleMobileDevic...	SYSTEM	00	7,848 K
CCSVCHST.EXE	RaymondCheydleur	00	10,260 K
CCSVCHST.EXE	SYSTEM	00	12,668 K
coherence.exe	SYSTEM	00	1,636 K
ColorMunki Design...	RaymondCheydleur	00	14,780 K
Crypserv.exe	SYSTEM	00	3,184 K
CSRSS.EXE	SYSTEM	00	4,344 K
CTFMON.EXE	RaymondCheydleur	00	4,240 K
CVPND.EXE	SYSTEM	00	6,152 K
eEBSvc.exe	SYSTEM	00	3,760 K
Explorer.EXE	RaymondCheydleur	00	31,312 K
HASPLMS.EXE	SYSTEM	00	14,840 K
iPodService.exe	SYSTEM	00	4,296 K
iTunesHelper.exe	RaymondCheydleur	00	15,776 K
JQS.EXE	SYSTEM	00	1,412 K
jusched.exe	RaymondCheydleur	00	11,456 K
LSASS.EXE	SYSTEM	00	2,064 K
MDM.EXE	SYSTEM	00	3,064 K
mDNSResponder....	SYSTEM	00	3,972 K
PRL_CC.EXE	RaymondCheydleur	00	10,560 K
prl_tools.exe	SYSTEM	00	3,560 K
prl_tools_service....	SYSTEM	00	3,616 K
PsiService_2.exe	SYSTEM	00	2,252 K
searchindexer.exe	SYSTEM	00	7,624 K

☐ Show processes from all users   [End Process]

Processes: 44   CPU Usage: 0%   Commit Charge: 403M / 1769M

This shows the ColorMunki tray application in Windows Task Manager

Windows Task Manager

File Options View Help

Applications | Processes | Performance | Networking

Image Name	User Name	CPU	Mem Usage
MDM.EXE	SYSTEM	00	3,064 K
mDNSResponder....	SYSTEM	00	3,972 K
PRL_CC.EXE	RaymondCheydleur	00	10,560 K
prl_tools.exe	SYSTEM	00	3,560 K
prl_tools_service....	SYSTEM	00	3,616 K
PsiService_2.exe	SYSTEM	00	2,252 K
searchindexer.exe	SYSTEM	00	7,624 K
SERVICES.EXE	SYSTEM	00	3,760 K
SMSS.EXE	SYSTEM	00	436 K
SPOOLSV.EXE	SYSTEM	00	7,328 K
SVCHOST.EXE	SYSTEM	00	4,716 K
SVCHOST.EXE	SYSTEM	00	5,124 K
SVCHOST.EXE	NETWORK SERVICE	00	4,656 K
SVCHOST.EXE	SYSTEM	00	41,256 K
SVCHOST.EXE	NETWORK SERVICE	00	3,812 K
SVCHOST.EXE	LOCAL SERVICE	00	4,336 K
SVCHOST.EXE	LOCAL SERVICE	00	7,528 K
System	SYSTEM	00	252 K
System Idle Process	SYSTEM	99	28 K
taskmgr.exe	RaymondCheydleur	00	5,716 K
VMUSrvc.exe	RaymondCheydleur	00	3,824 K
WindowsSearch.exe	RaymondCheydleur	00	12,660 K
WINLOGON.EXE	SYSTEM	00	1,640 K
WMIPRVSE.EXE	SYSTEM	00	5,280 K
XRDD.EXE	SYSTEM	00	19,108 K

☐ Show processes from all users   [End Process]

Processes: 44   CPU Usage: 0%   Commit Charge: 403M / 1769M

This shows the XRDD service in Windows task Manager. Normally this should NOT be disabled – but it may be useful to disable this for testing.