

Advantech AE Technical Share Document

Date	2018/3/15	SR#	1-3381795781
Category	<input checked="" type="checkbox"/> FAQ <input type="checkbox"/> SOP	Related OS	Windows
Abstract	Get Finite Buffered Data in an Acquisition		
Keyword	Finite Buffered Data, DAQNav 4.0, DAQNav SDK		
Related Product	PCI-1706, PCI-1710U/HGU/UL, PCI-1711U/UL, PCI-1712, PCI-1712L, PCI-1713U, PCI-1714U/UL, PCI-1715U, PCI-1716, PCI-1718HGU/GU, PCI-1741U, PCI-1742U, PCI-1747U, PCIE-1802, PCIE-1810, PCIE-1816/H, PCIE-1840, PCM-3718H, PCM-3718HO, PCM-3810I, PCM-3813I, USB-4702, USB-4704, USB-4711A, USB-4716		

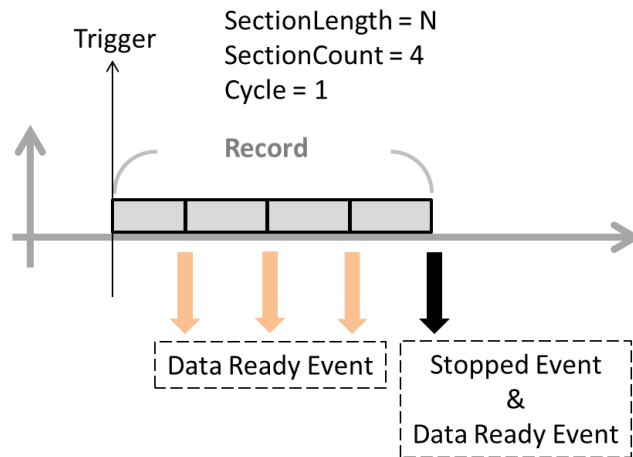
Please make sure your SDK version is 4.x.x.x before you start this FAQ.

The parameter “Section Count” in DAQNav SDK is to set the number of acquired buffers in the analog input function. By setting this parameter other than 0* can make your acquisition a “finite buffer acquisition”.

(* 0: Streaming, 1: One buffer, N: Finite Buffered Data Acquisition)

The mechanism can be described in below picture. Set the *SectionLength = N*, *SectionCount = 4* then four section buffers would be returned with N samples in each of them that can be gotten back by *GetData*. The trigger can either be a software trigger or a hardware trigger base on different requirements. In this kind of application, the cycle should be set to zero that indicates “single Record*”.

(* Record: every single section of acquisition)



This is a function acts like the burst function of function generator. The acquisition would be stopped automatically right after the last DataReady event is raised. A start command should be entered in order to initiate next acquisition.

■ Brief Solution - Step by Step:

C++:

```
int32 sectionCount = 4; // sets sectionCount as 4
Record * record = waveformAiCtrl->getRecord();
record->setSectionCount(sectionCount);
```

C#:

```
int sectionCount = 4; // sets sectionCount as 4
Record record = waveformAiCtrl.Record;
record.SectionCount = sectionCount;
```

■ **Reference:**

StreamingAI Setting Parameters in Advantech DAQNav framework

<http://forum.adamcommunity.com/viewthread.php?tid=95942&extra=page%3D1>