Introducing DX4700/4800

Maximum System Value for IP Migration

PELCO
by Schneider Electric

Product Positioning

- Top-End Embedded Market
- 8 or 16 Analog Channels
- PLUS 2 IP Megapixel Cameras

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Pelco DX47/4800 hybrid video recorders were designed for customers who want to begin a step-by-step migration to megapixel video while still gaining maximum value from their existing analog video surveillance infrastructure. This is made possible with the introduction of the new DX4700 and DX4800 hybrid video recorders – the latest in the Pelco DX4000 Series of video management solutions.

The DX47/4800 addresses the current top-end of the embedded market – typically occupied by hybrids that are only capable of standard definition recording.

Available with eight or 16 analog channels — PLUS two additional, dedicated megapixel camera channels — DX4700 and DX4800 offer an unmatched combination of power and performance in a cost-effective package for mid-range applications.

Product Positioning

- Between DX8100 and DX4600
- Most of the Features for a Fraction of the Price
- Replacement for DVR5100

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In our own product mix the new DX47/4800 series sits between the DX8100 and 45/4600. For DX8100 customers being pressured by pricing and features from the embedded market; and for analog customers that need to add megapixel IP. In fact the DX47/4800 meets a vast portion of the DX8100 capabilities - for example features such as ATM/POS recording, improved audio recording and more - at just a fraction of the price.

As the DVR5100 is no longer available – the DX4800 becomes a very reasonably priced replacement for those customers looking for real time recording at 4 CIF.

> For Real-time recording 4 CIF recording, three years ago the mix was about 90% SD to 10% HD; last year that changed to 50/50. This year everyone will be expecting megapixel, or high-definition recording. That's what we're addressing. Three years ago when we introduced DVR5100 we could support up to 16 IP cameras on structured cabling. Now that we've released the DX47/4800, customers can take advantage of their existing structured cabling – as well as take advantage of cheaper cabling for analog requirements. Available with eight or 16 analog channels — plus two additional, dedicated megapixel camera channels — DX4700 and DX4800 offer an unmatched combination of power and performance in a cost-effective package for mid-range applications.

The value proposition of megapixel recording is essential in the presentation and offering of DX47/4800. It is what brings differentiation to our new hybrid from the many hybrids on the market today.

The value of megapixel video is understood by most of you – but let's review.

First, just to get a sense of scale of the size of files as we progress from CIF, .5 SVGA (or roughly 4 CIF) and 1.3 MP video. Clearly the files get bigger, the opportunity to zoom in on important detail increases – and we're not even looking at 2 and 3 MP resolution on this illustration. Let's take another perspective at video resolution.

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Here we have a robbery in progress – not the quality of video that most of our customers experience. The problem with video that the typically captured video is when we zoom into a portion of the video.

This CIF video is still typical of what many CCTV customers experience – the is usable only to tell that the suspect was wearing a blue hooded sweatshirt and carrying some soft of automatic pistol.

With a 4 CIF image we get a bit better clarity but we still can't tell if he has a beard or this is just shadow on this face. This video still doesn't provide any value for identifying the individual robbing the store.

Now at 1.3 megapixel, we start to realize the value of megapixel recording – this individual could easily be identified though the captured video.

From 2 megapixel recording and up – we are going to see value by zooming in from a distance of into small detail – perhaps a real close up look for identifying tattoos, clothing markings or in a difference scenario, across the street to zoom in at a license plate.

Since the DVR/HVR market is fast evolving, the use case for DX47/4800 is very important to understand.

As we stated earlier – the target market is customers who want to leverage the cost advantages of analog, whether for new of existing installs. Customers who want the benefits of the reduced cost of analog cameras, and for who analog cabling has its benefits.

These are the customers that have been exposed to, and want the benefits of, high-definition IP video. They want to take advantage of this at strategic locations, perhaps entry/exits, cash-counting, or high value merchandise.

The use case extends to Existing Installations who have all the structure of analog in place – all the wiring runs and the cameras. And like the new installations, they want to add the benefits of megapixel into their environments. An important fact worth noting is that we have over 76,000 DX installations to which we can bring this kind of capability!

And that leads us to the last application – a very large base of loyal DX and DS customers, who want to build on their Pelco solution – either as a dealer/integrator, or as a hybrid of systems at an end-customer environment – a university for example that has a variety of these solutions on campus.

Use Case

ADDING MP CAMERAS TO EXISITNG ANALOG ENVIRONMENTS			
MP Cameras	1 to 2		
DX47/48	√		
DS NVR			
EnduraXpress			

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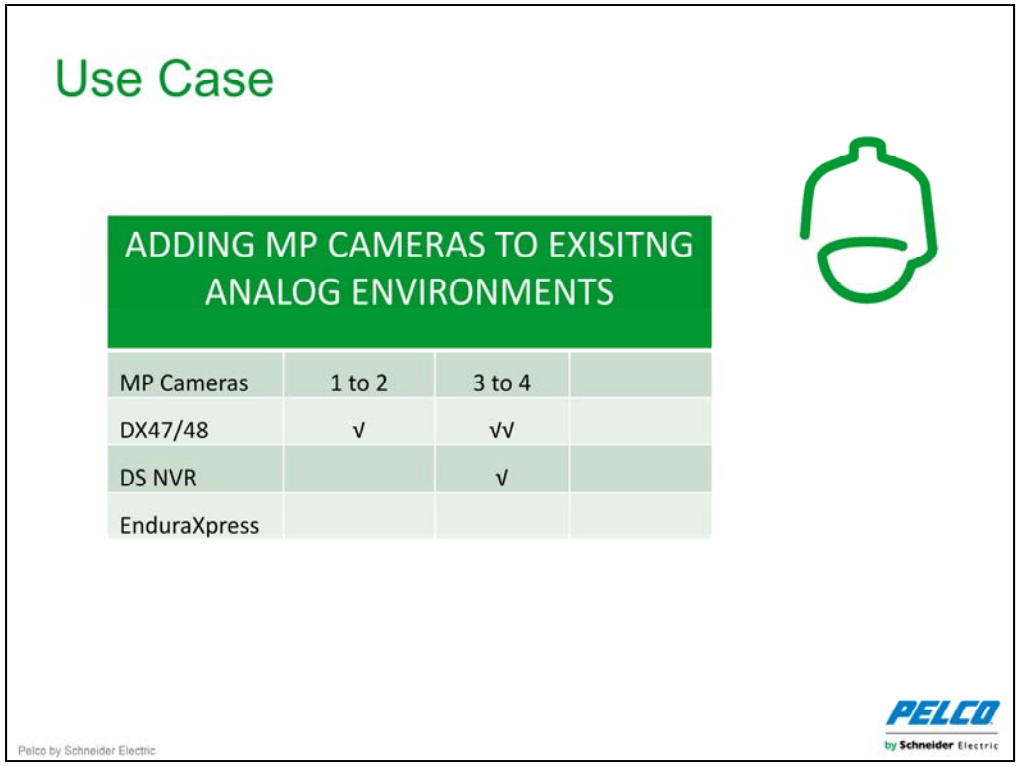
This chart shows us what product to apply to the number of megapixel cameras required. At the cost point of the DX47/4800, particularly with CPDs applied for large projects (we'll talk to that later) – customers can consider two DX47 or 4808s in cases where 4 megapixel cameras are required. Or DS NVR with our four free licenses is also a very cost effective solution.

At 5 + HD camera requirements, we would direct customers to DS or to EnduraXpress.



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Use Case

ADDING MP CAMERAS TO EXISITNG ANALOG ENVIRONMENTS			
MP Cameras	1 to 2	3 to 4	5 +
DX47/48	√	√√	
DS NVR		√	√
EnduraXpress			√

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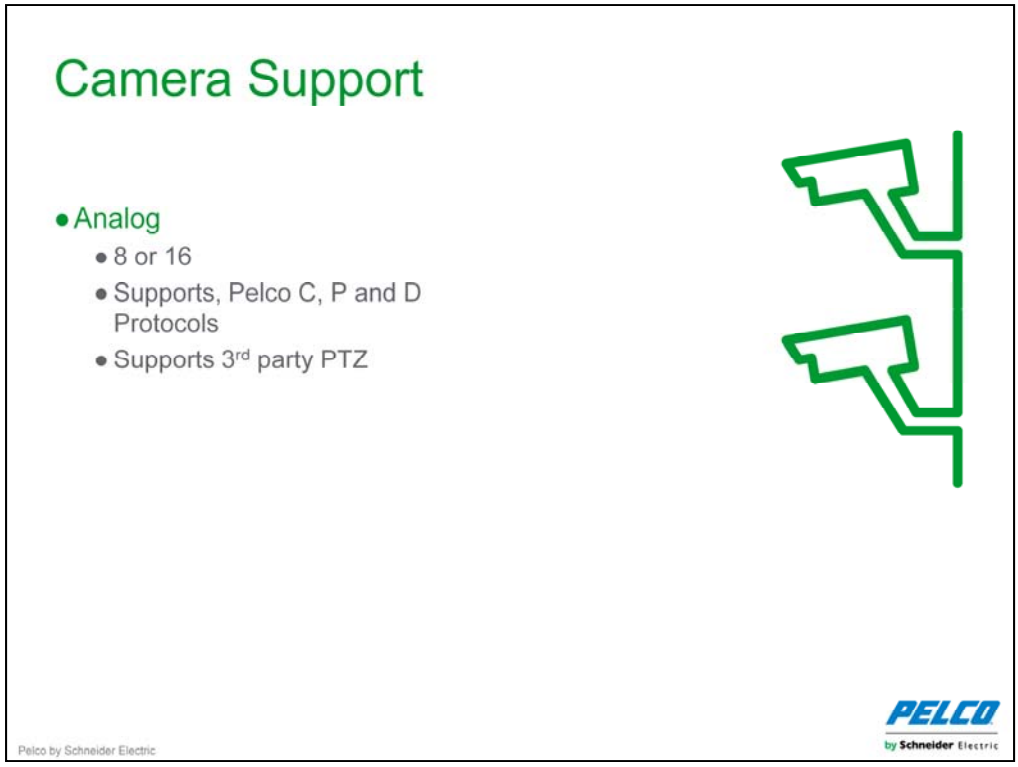
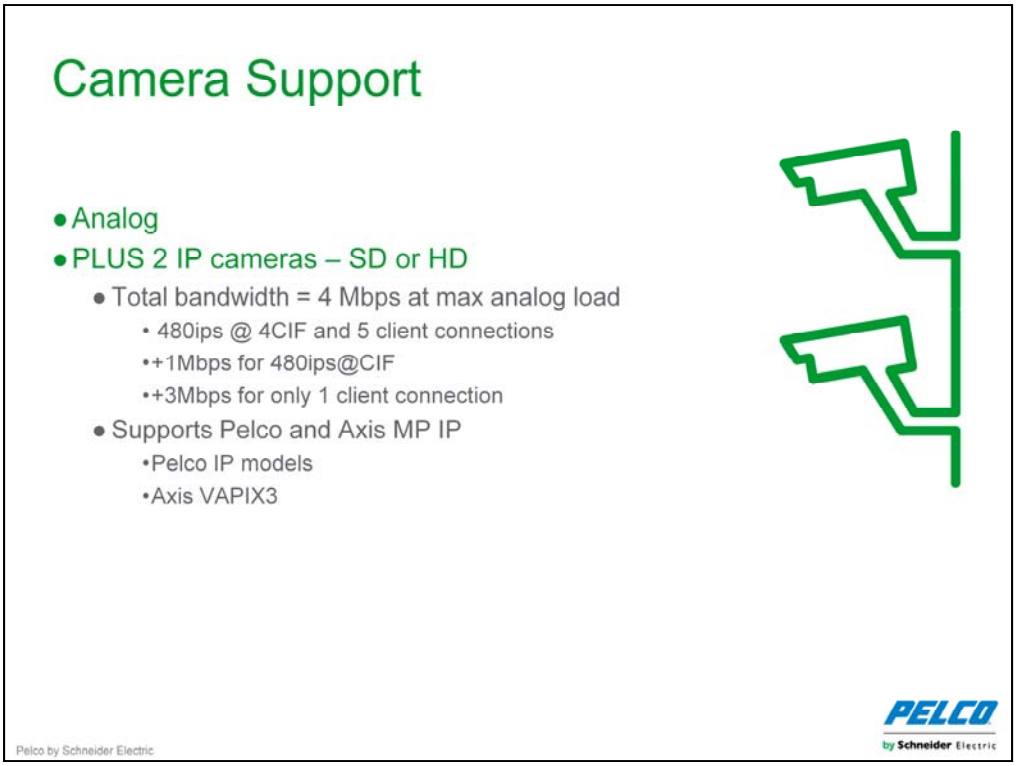


While we don't want to dwell on speeds and feed, there are some performance factors we want to make sure you understand:

Let's just touch a bit on analog to make sure we're all on the same page.

8 or 16 channel model

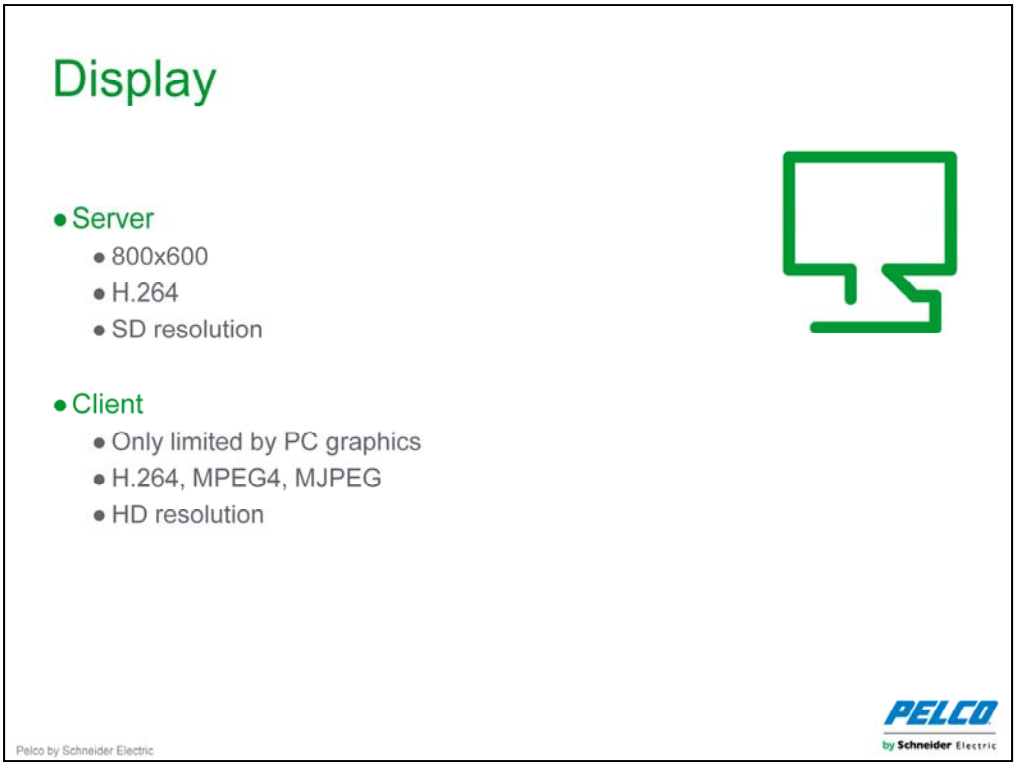
PTZ support, Pelco C, P, D



Let's touch the IP side. No doubt there are plenty of hybrid on the market. Today most of those systems do either or both of two things: 1) they support 8 or 16 SD cameras 2) they reduce the number of analog cameras by the number of IP cameras supported. In the future we can look forward to additional HD camera support - today we support a substantial use case with our 8 or 16 analog PLUS 2 IP cameras recording either SD or HD video.

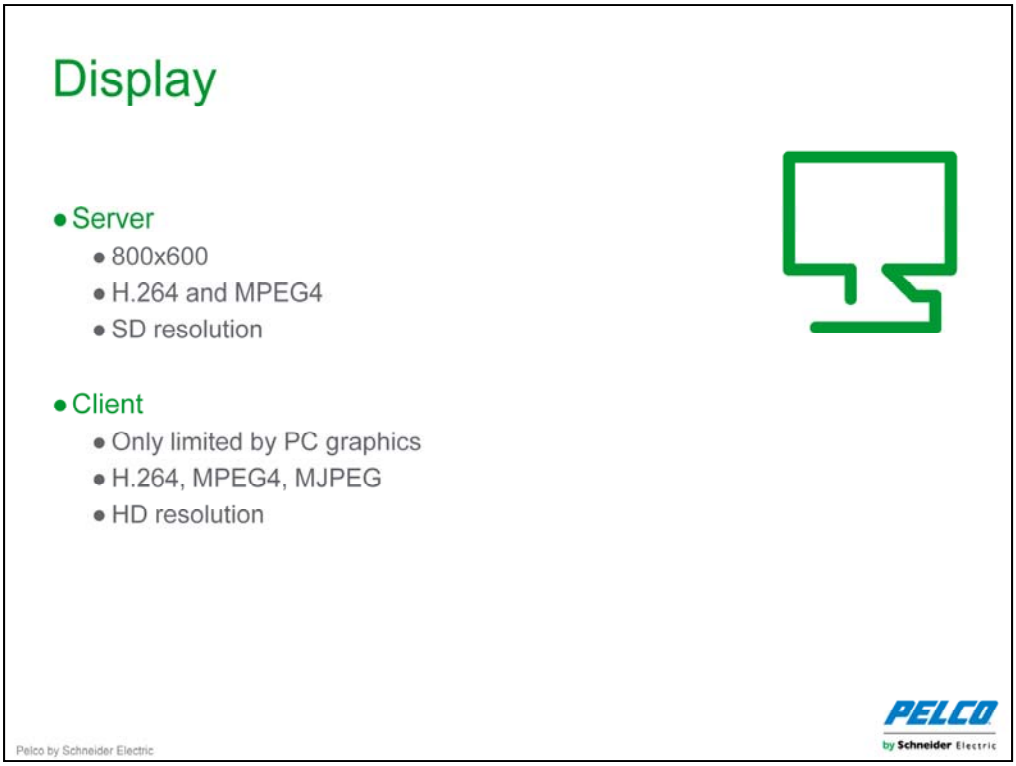
The total bandwidth supported is 4 Mbps at a maximum analog load, that is 480/400 IPS and 4 CIF for a DX47800 with 5 client connections. Thought we don't gain support for any additional cameras at less than maximum settings, we do gain additional bandwidth – for example, if recording at only 480 IPS @ CIF, as with the DX4700, we gain another 1 Mbps; if with only 1 client connection, we gain and additional 3 Mpbs.

Also on the IP camera side – we support the most important camera line for us – that is Sarix! We also support Axis – for both lines, SD and HD cameras. For Axis today, those cameras written to their VAPIX 3 API.



Now, let's look at our initial support for the display.

With our first release of the product, customers will get SD resolution and H.264 at the server.



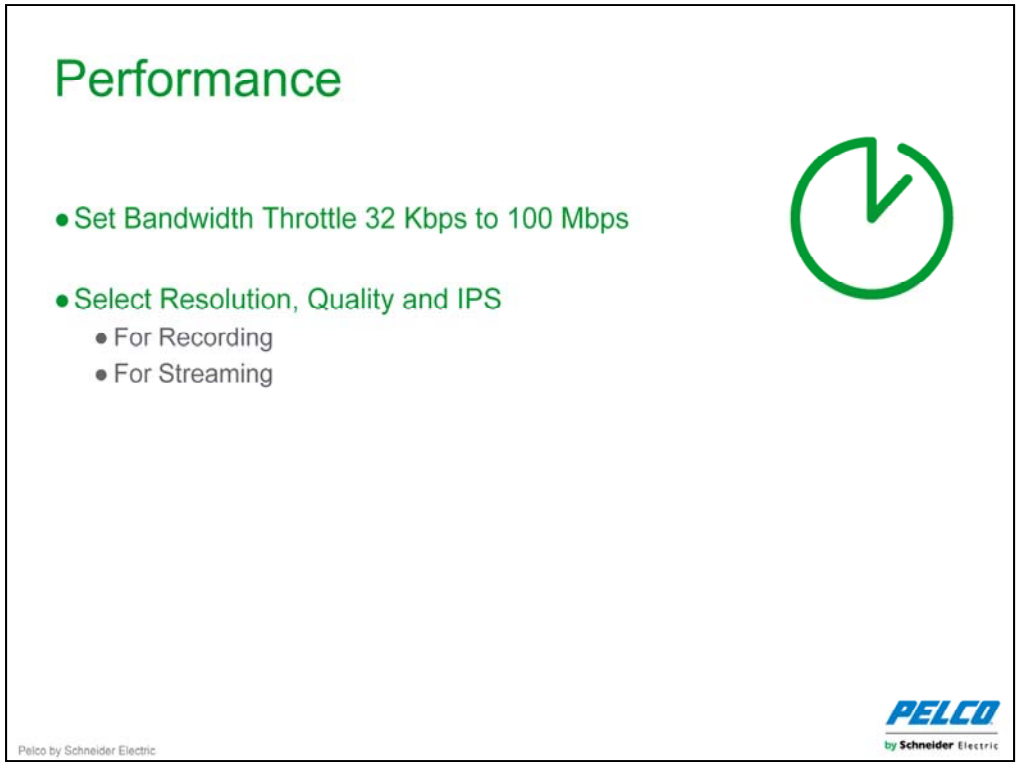
Now, let's look at our initial support for the display.

With our first release of the product, customers will get SD resolution and H.264 at the server. With an update soon to follow, we will support MPEG4 display at the server.

Meanwhile customers will have full viewing capability at the client, restricted only by the hardware they deploy.

1. Current circuitry of DX47/4800 does not support the co-processors of the Sarix E Series or HD display at server
    1. E-series will be fixed in 1.1; HD display at server will be available in Version 2.0. We'll look at Roadmap later in this presentation.

2. E Series and HD can be recorded and can be displayed at client

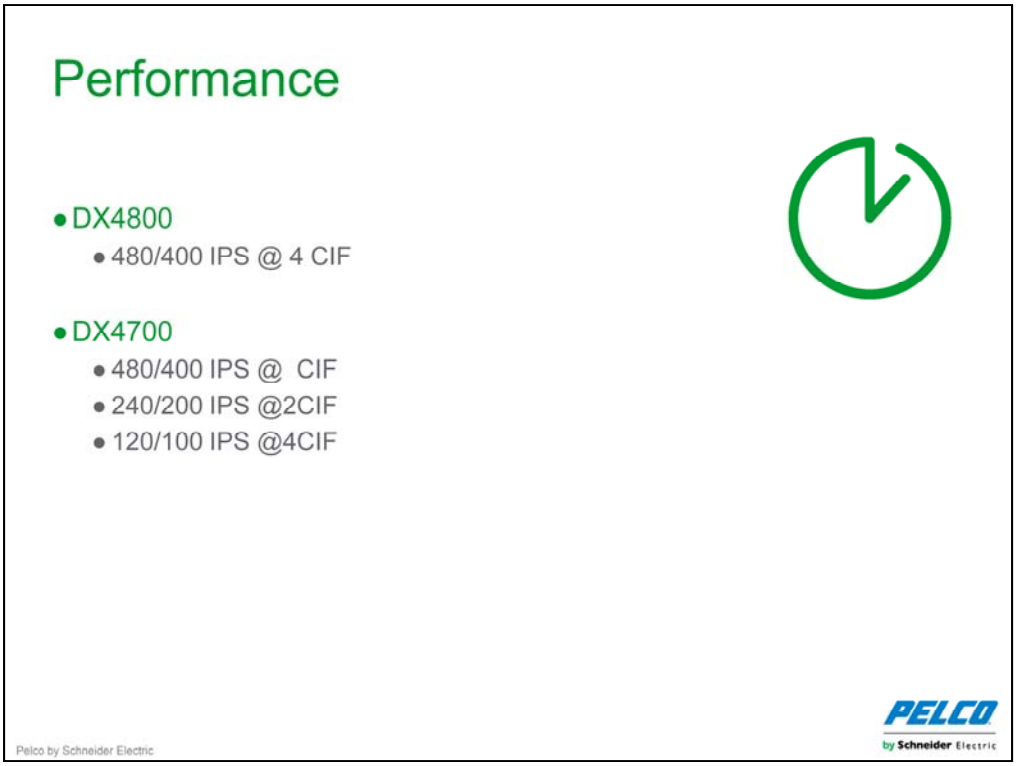


The performance for DX47/4800 is well-suited for customers with limited bandwidth.

Our bandwidth throttle is lower than the DX8100 capabilities and goes down as low as 32 Kbps.

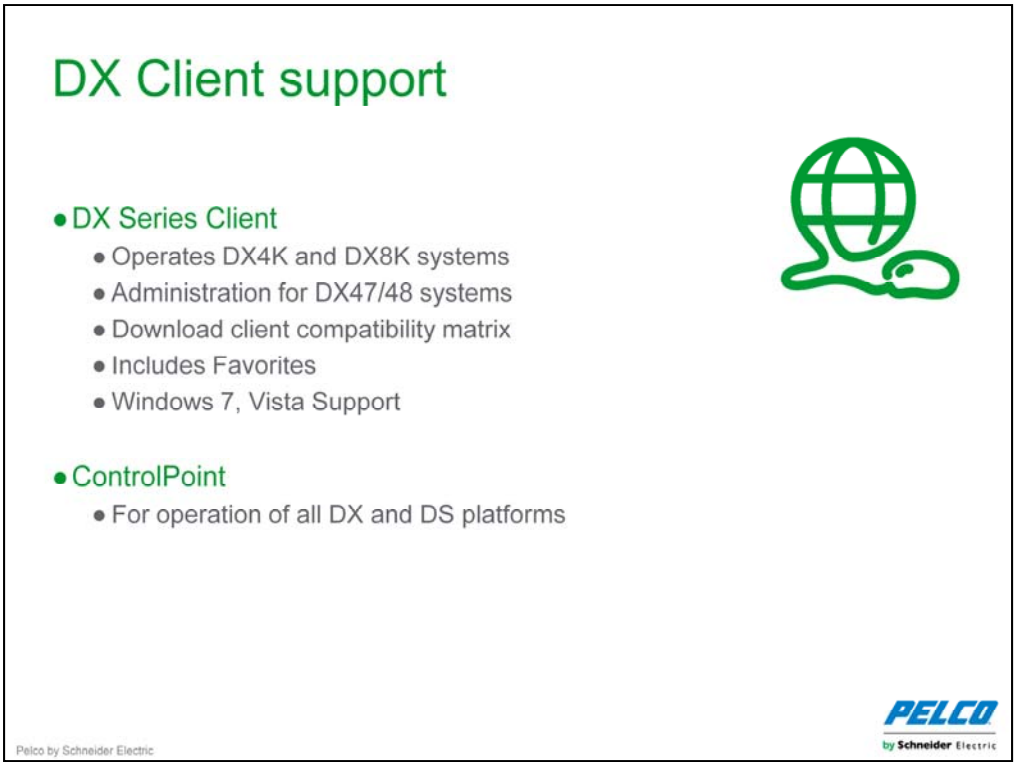
Additionally, and not always the case with embedded systems, you can the quality and IPS per camera for both recording and streaming purposes. You can set the resolution for streaming for a group of 8 cameras.

These features combined let our customers fine tune performance for their specific circumstances.



And just another reminder – it is the DX4800 that gives us 480/400 IPS at 4CIF, with the DX4700 performance in line with what we've provided with DX4600 and DX8100.

Like the DX8100 there is one A/D chip to support a group of 4 cameras, and this provides 120 IPS for a group of 4. The UI limits that selection, only in the DX4700 – it's not a concern for DX4800. So system design in the case of DX4700 requires a bit more thought, just as with DX8100 where the installer is concerned with settings in camera groups: 1 – 4, 5 – 8, 9 – 12, and 13 – 16.



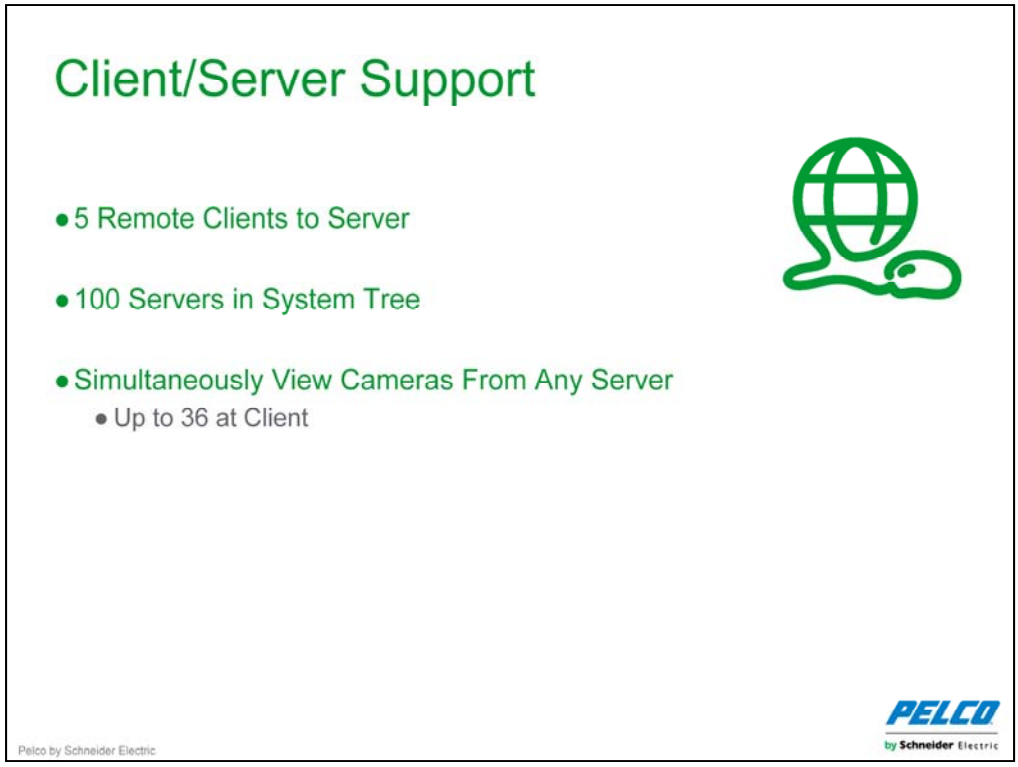
Let's have a look at client capability for DX4700/4800.

The DX Series Client is what we previously referred to as the DX Common Client. There is a matrix of capabilities with this client – it performs a bit differently dependent on which head end, and so we've created a compatibility matrix that is part of the client manual. For easy access, we'll also provide that on the Extranet.

This client provides full operational and administrative functions for the DX4700/4800 – for all others, with regards to operational limitations, refer to the matrix.

We should point out to customers that we provide the very useful Favorites function that we first saw in the DX8100 – and we realized what was a long wait we now can provide Windows 7 and Vista support to our DX8100 clients, again for operational use.

With regards to ControlPoint – almost every other DVR/HVR vendor provides a common client for mixed platforms. But don't forget that our ControlPoint client not only offers connectivity between two distinct platforms – DX and DS – it is also part of our software only solution. And this is not a product offering that most other hardware vendors provide!

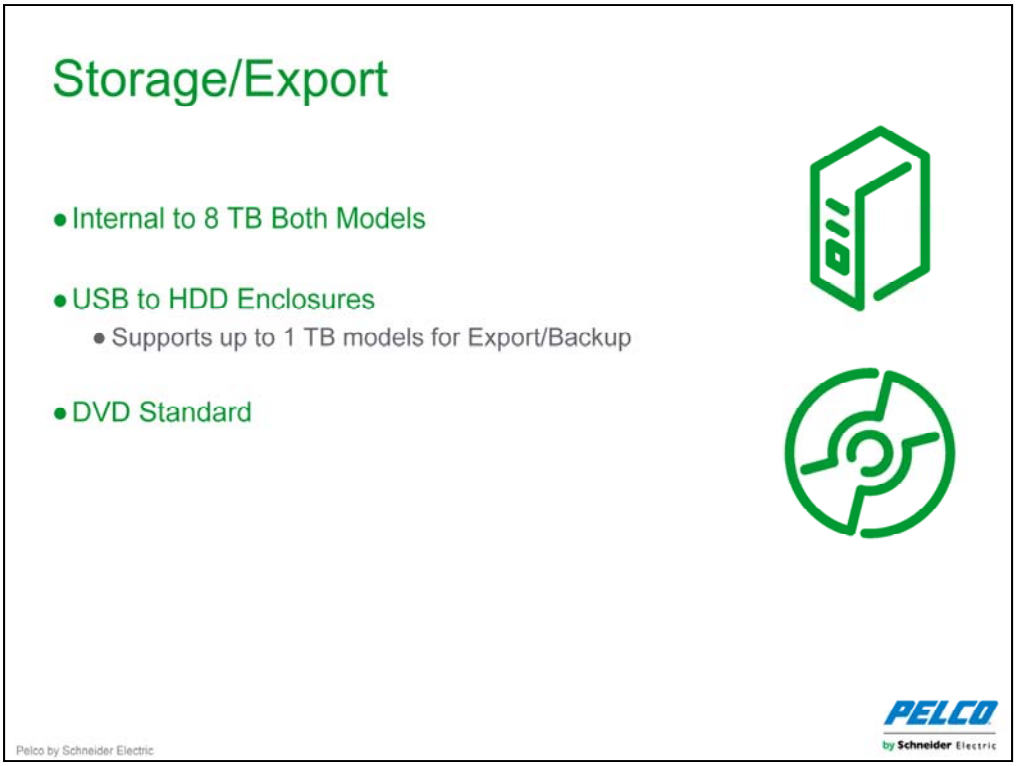


Not completely new, but as a reminder, because we are often asked the client to server parameters are much the same as with the rest of the DX platform:

•One server can support five simultaneous remote connections

•Any DX client can view as many as 100 DX47/4800s in their tree

•And the DX Series client can simultaneously view as many as 36 cameras from any one of those servers.



On the storage side:

1)DX4700/4800 both have 4 drive bays – that provides for 8 TB today and soon we'll support 12 TB total when we finish testing 3 TB drives. Many vendors in the hybrid class only offer 2 to 4 TB of storage. We have an edge there.

2)We know you have been concerned about the pricing per TB for HDD. We have compared DX4700/4800 to what our tier 1 competitors offer and we believe we line up with what they offer.

3)Storage can be expanded for export/backup purposes with commercially available external HDD enclosures

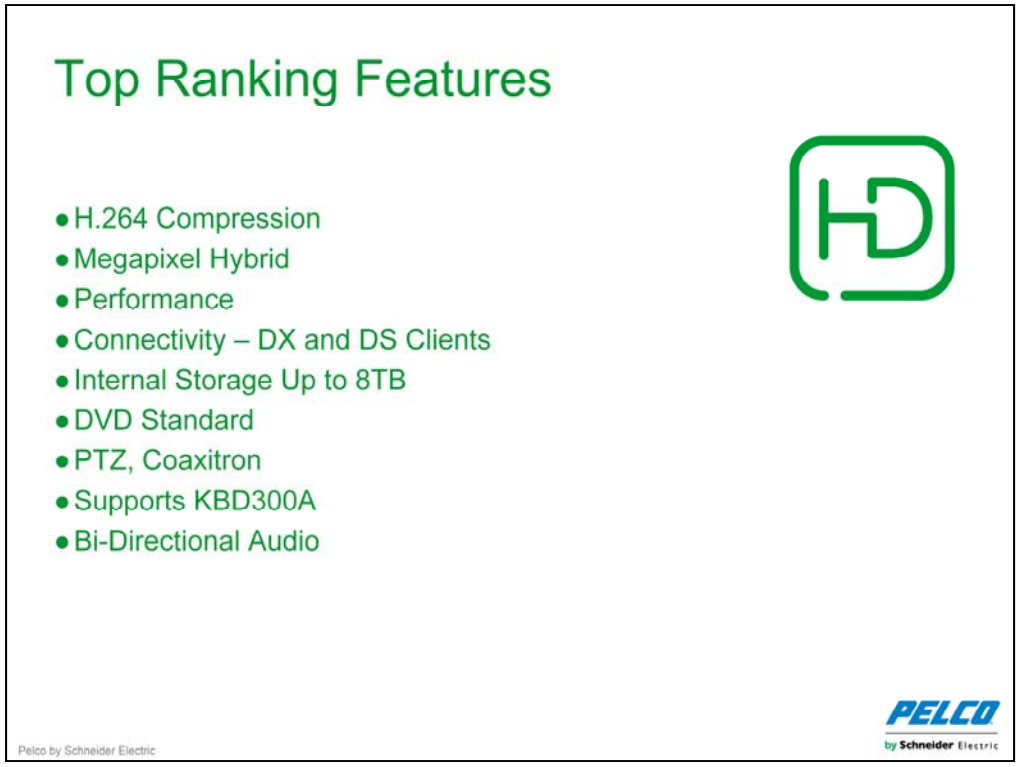
4)And finally, we include DVD as standard to make ordering easier and to offer better value to our customers.

Some storage examples show the efficiency of H.264 compression:

1)A fully maxed DX4800, recording all 18 channels 30 IPS, Analog 4 CIF and best quality; IP set for 1920x1080 (2.1MP). An 8 TB model will provide 72 days retention

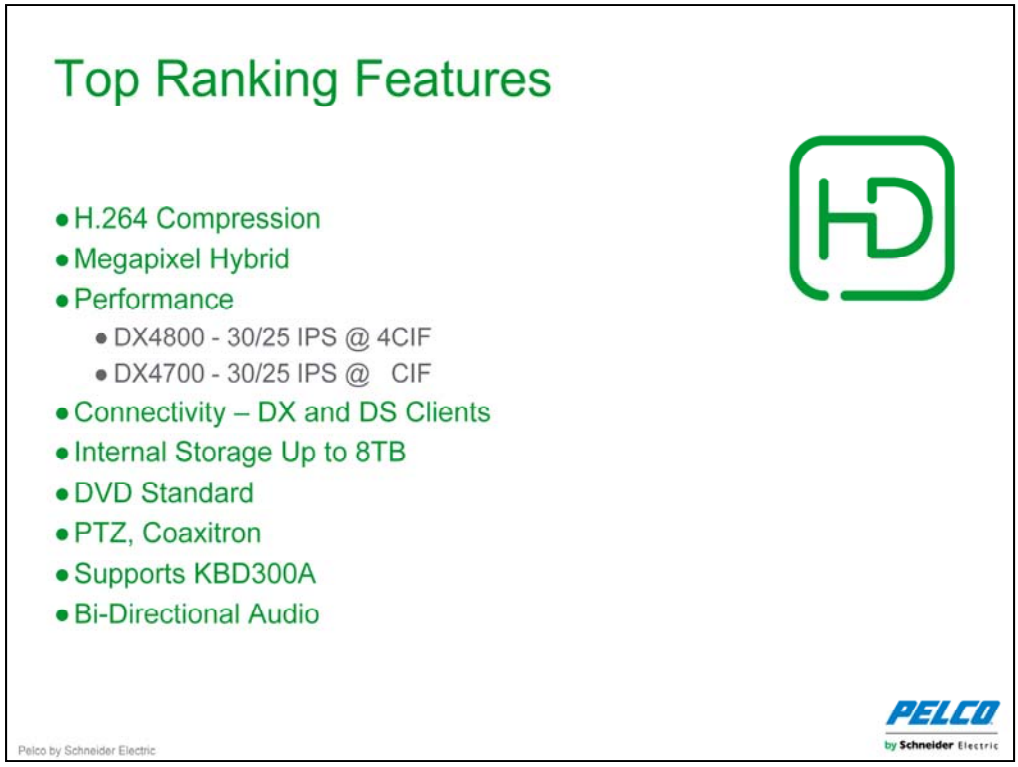
2)If we cut analog to 2 CIF/Medium quality and leave IP alone, we get 90 days storage

3)Tune analog down to 3 IPS, low quality, low resolution; IP down to 1 MB, and we get 155 days storage. As soon as we have the 12 TB drives we could expect to get over 230 days.



Now this is not a list of speeds and feeds – you can get that from the spec sheet and other sales documents. This is the list ranking of features as provided by our beta test sites – sites from all around the globe.

These are the value areas that customers recognized and which you will want to focus on in your own sales efforts.



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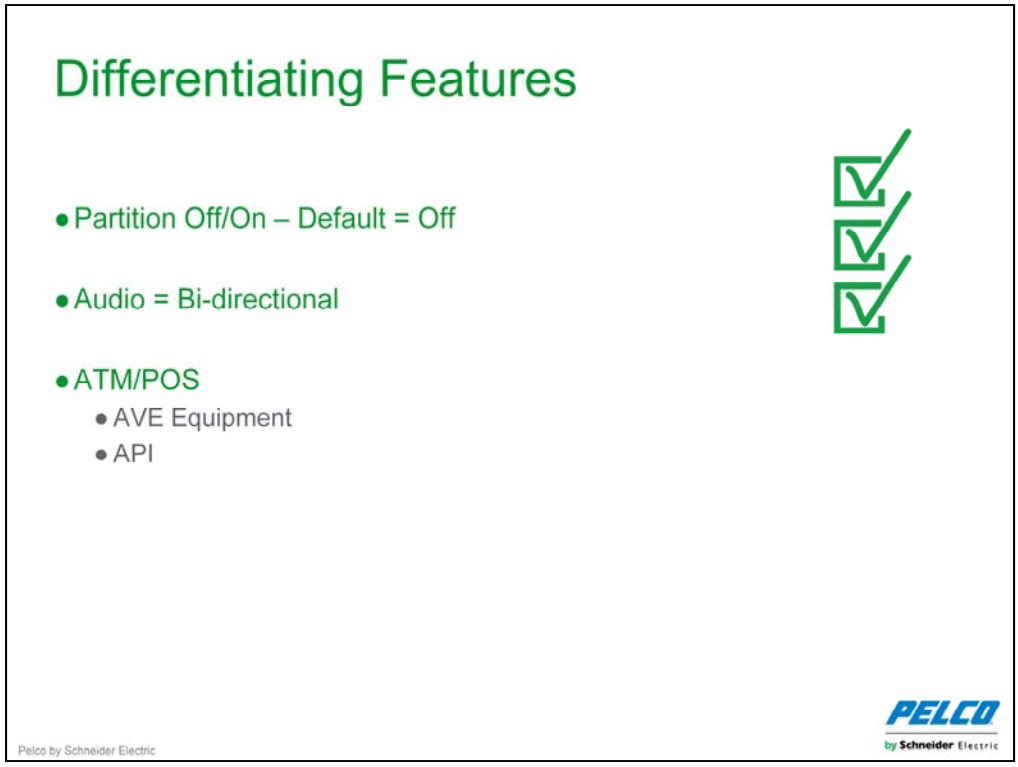
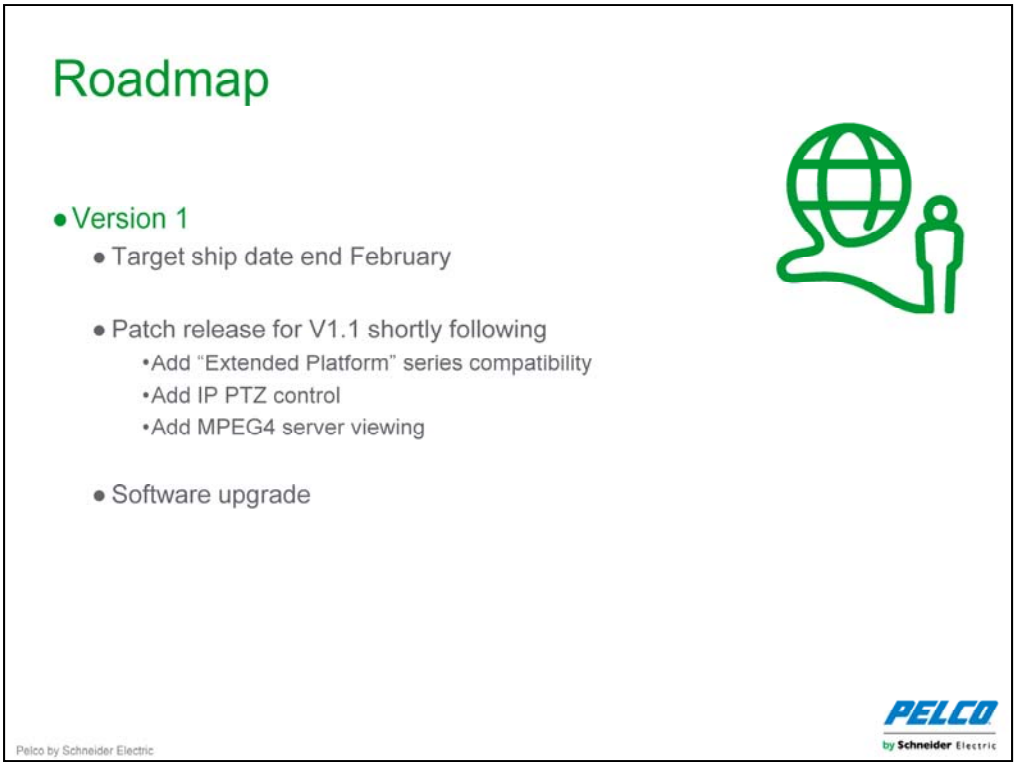


Let's have a look at Differentiating Features from the rest of our DX line:

1)HDD Partitioning has created some discussion over the years. Many of our customers sold this as a benefit that allowed customers to optimize storage. Those that may still have been unaware of this capability ran this risk of losing storage with any future changes. As a result, this feature not is defaulted for off allowing customers to take best advantage as they see fit.

2)We now have bi-directional audio as we did in DX4000. Our beta sites reported back satisfaction with audio quality – this will be a good solution for those corrections institutions and holding rooms that require audio. The Bi-directional audio is a good feature for added security to alert people know that they are being recording – or for training purposes.

3)And like our DX8100 we can support ATM/POS Using AVE Equipment. We believe customers will get the most value from an API integration. For example for a number of stores, buying AVE equipment for each store may be cost-prohibitive. Further customers typically already having their financial applications established. Ultimately we want to inform customers of both the API approach and the text integration strategy. We'll talk more about APIs later.



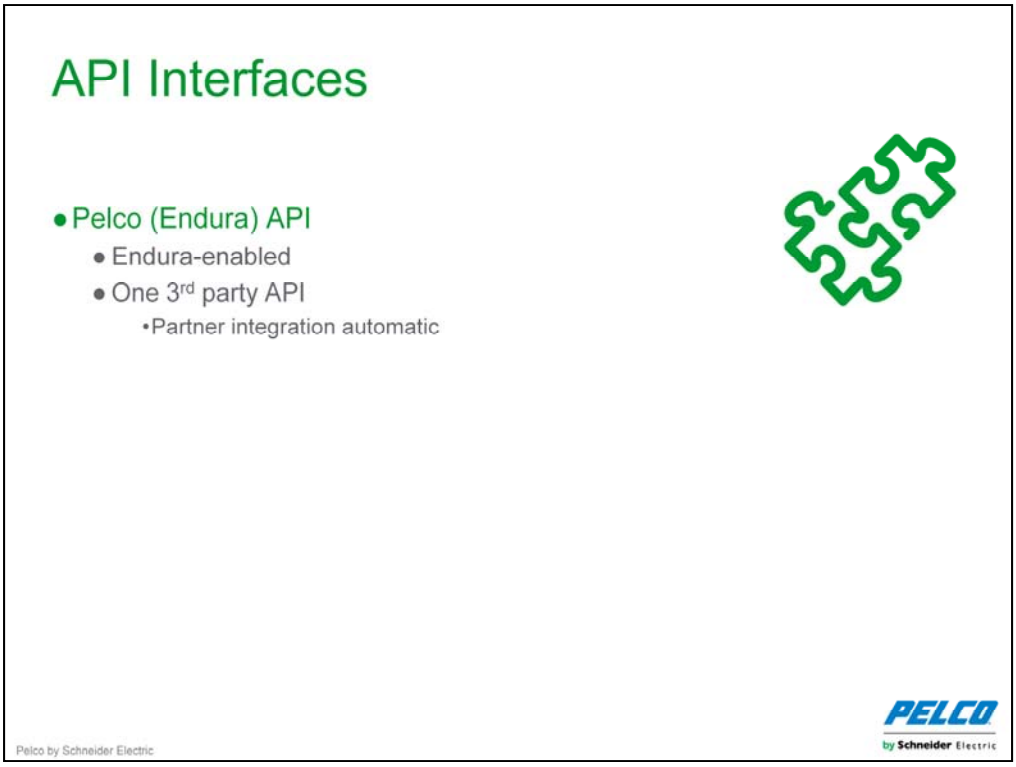
Let's look at where we're headed with DX47/4800:

We fully expect to ship Version 1 by the end of this month. Within about 8 weeks we will have a software patch that supports the Sarix E series, the extended platform. We should have ability to drive IP PTZ cameras and add MPEG4 viewing at the server.

Version 2, which currently looks to be a Q4 release will provide support for eSATA drives for recording as well as backup/export. And it will gain the ability to view megapixel cameras at the server in an 1080P display.

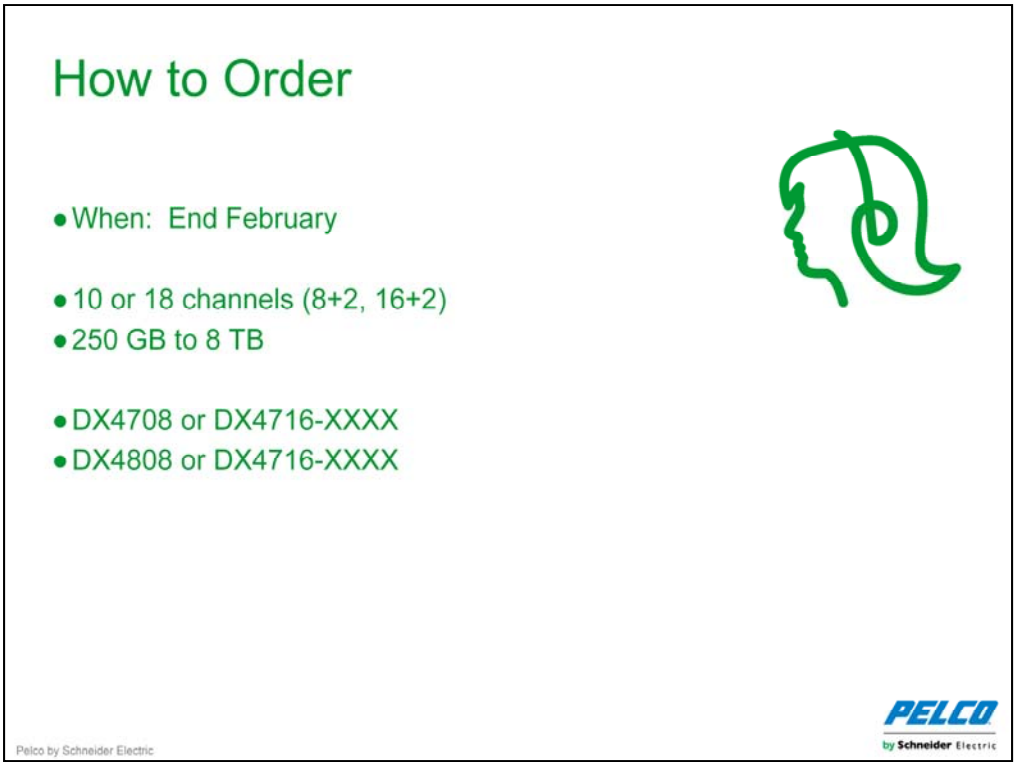
Because them motherboard will change due the back panel and the chip set, this will require a hardware upgrade. Our goal in this version is to make previous units field upgradable through a kit, available at a modest cost.

For our US customers, we are working on DIACAP compliance for Version 2 as well.



We will see something different on DX4700/4800 in the way of APIs

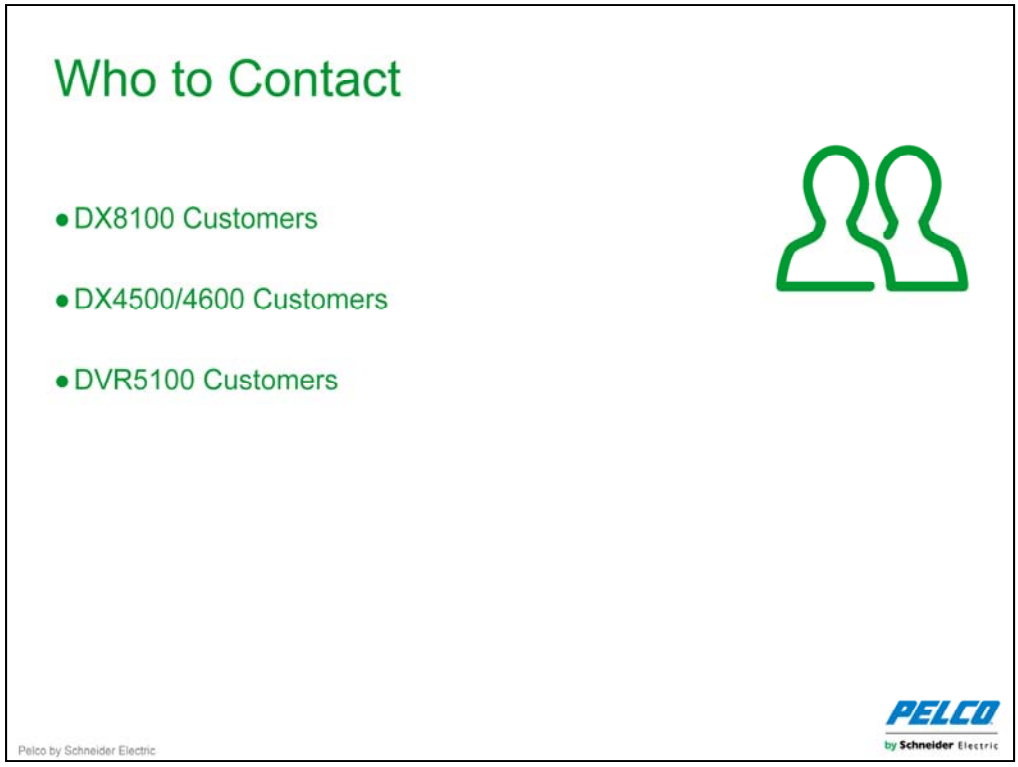
There will not be a “native” API for DX4700/4800 – there will instead be a Pelco API, based on Endura APIs. This is intended to offer us two things: 1) Endura-enabled capabilities so that an Endura viewing station can view video from these devices and 2) so that our integration partners only have to write their application interfaces once – and then have support for Endura and for the DX47/4800 systems.



Ordering DX4700/4800 is very easy.

First, it's available end of this month, and very possibly will be in Qantel this week. You are ordering 8 or16 channel models and always receiving capability for the two IP channels

Storage is from 250 GB to 8 TB today as we discussed earlier. We won't have a designation for DVD in the part number since DVD is included.

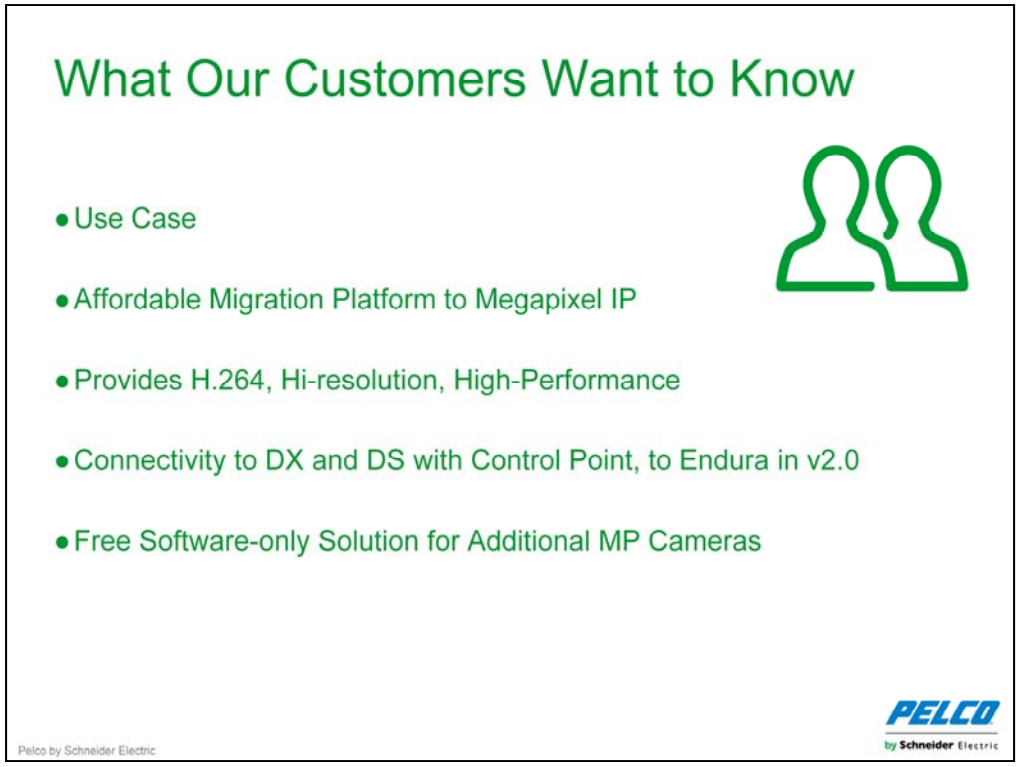


We're sure you'll have a good sense of who to call for the DX4700/4800.

Those DX8100 customers who have been doing battle with downward pricing pressures – they may not be using all of the capability of DX8100 and will be satisfied with 75% of the feature set for 46% of the price. Maybe DX8000/DX8100 customers who you haven't touched for a while.

DX4500/4600 customers, as we saw in our Use Case discussions, who want to add megapixel capability are excellent candidates

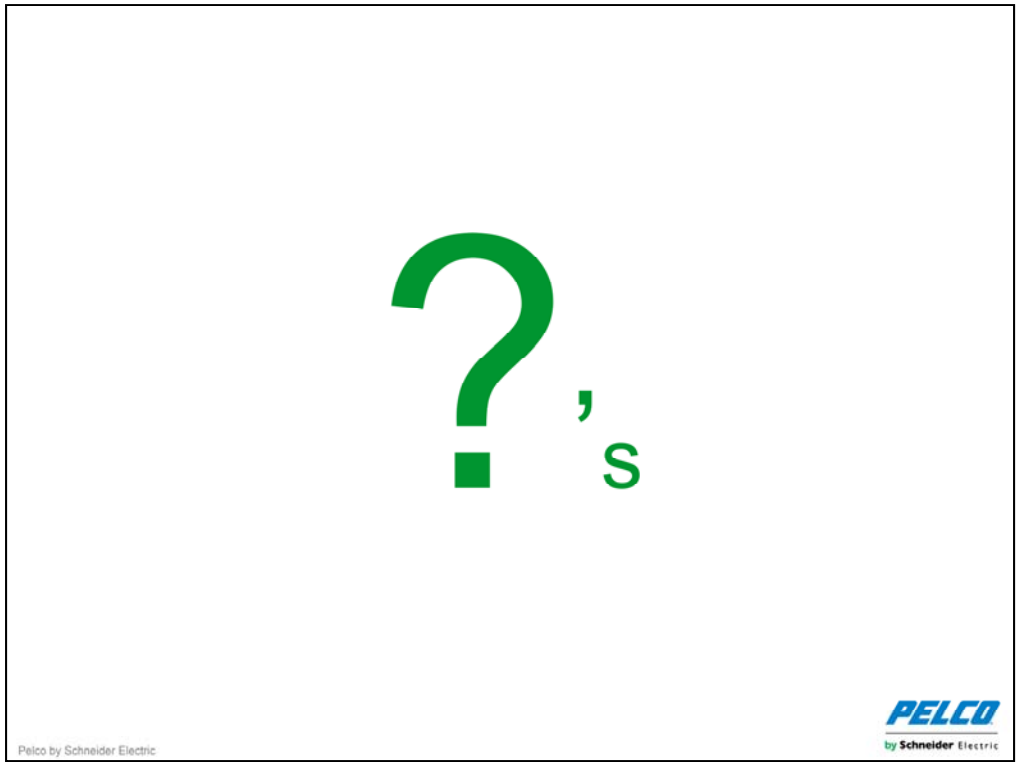
And finally DVR5100 customers who needed the 30 or 25 IPS at 4 CIF. All in all a base of over 83,000 potential customers.



Pardon the repetition but we want to emphasize how important the Use Case is. That will be the basis for our success…8 or 16 analog, PLUS 2 IP Megapixel Cameras, up to 3 Megapixels each.

This provides an easy path transition to the world of HD video recording

With the DX47/4800 they get hybrid capabilities, High-resolution, real-time recording with transparent connectivity to a very wide world of DX and DS customers.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