Male Speaker: This presentation is about the drill through capabilities that have been added to the drill through feature in IBM Cognos 8.4. There will be three capabilities that I will be talking about related to drill through shown here on the agenda. One is the drill through assistant that is the first one and then we will talk about dynamic drill through capability that has been added and the drill through support for member properties. As you will notice, these capabilities will do a number of things. Primarily, they will make the drill through experience a lot more helpful for the drill authors and report authors. So, let's get into the drill through assistant. Drill through assistant, think of it as a capability which will help you in making sure that the drill through definition that you are setting up is going to work the way you would like it to work and you can also think of it as a debugging feature whereas if a certain drill through setup is not rendering the results that you expect, you can always go back and debug your drill through definition and make sure it delivers the kind of results that you are looking for. You do need special permission to have the drill through assistant capability. So, once they are there, you will be able to use two key features within the drill through assistant; one is that you will be able to see what context values are being passed from the source report to the drill through service and secondly, you will be able to see what parameters on the target side are being satisfied within this drill through experience. As I just mentioned, there are two main capabilities within the drill through assistant, view passed source values and view target mappings. This is a screen shot of the Go To page which lists the possible drill through definitions that a user can use while drilling through and as you can see the red circles show the two capabilities; one is to view target mapping and the other one is to view passed source values. I will quickly show you how it actually works. So, here I have an analysis from the Analysis Studio, which shows order methods and it shows the time dimension with years and the measure is the revenue. So, I want to drill through from telephone in 2004 revenue and go into a more detailed report and while doing that, I will be able to see how the drill through assistant works. So, let's initiate our drill through from here. As you notice, I am at my Go To page and I see the possible drill through definitions that I can leverage. So, I choose the last one, but before I go into this and see what is under this drill through definition, let's look at the view passed source values capability that I just talked about. So, notice what you see here looks like the context where you started from. So, I have the revenue order method type and the year and look at the display value and the used value. The display value is what you see when you started off with the drill through from the source, which we just did and you see the value on the cell that we started from and that was… telephone was the order method type and 2004 was the year from the time dimension. Look at the used value column. What you see here is basically how drill through service extract values from the context members. So, these two values at the bottom are the member unique name or the months. Because we are coming from an OLAP source, these members are read as months by the drill through service. Now, the other capability - view target mapping. If I click on that, notice that I have now the parameter name and this parameter name is the parameter name in the target report. So, it's coming from the target report, I am once again having the display value column, which is showing you where I started from, which was the telephone order method and the use value… the use value has important value here, because the use value is the value which you feed to this parameter… target parameter. So, drill through service has taken the context, changed it

to the data type which the target parameter needs, and it feeds at this use value. Okay. So, let's move on. The next improvement in drill through is the additional dynamic drill through. So, dynamic drill through makes your life easy by not having you create filters or parameters on the target side. It simplifies the process greatly and what it needs is basically to be able to match the model data item from the source to the model data item to the target and if that doesn't work, then it maps the model data item from the source to the report data item on the target. So, these are the matching criteria and I will show you another slide which outlines these. This is a simple depiction of how dynamic drill through in 8.4 works. So, I will start off from source report, which is Analysis Studio report, has a model data item, which is country and I am drilling on Canada. It takes that country model, data item, and maps it to the target Report Studio report which is based on a relational model and it filters using the country model data item and the value Canada. So, here is the matching criteria that I just mentioned. Filter service will take the model data item from the source and match it… try to match it to the target model item name on the target side or if that doesn't work, it's going to take the source model item name and try to match it with the target report data item name. If both of these don't match, then the source item is ignored and the report is not filtered. The rendered, final report… target report is not filtered according to the context that was passed. Now, let's take a look at the demo. So, we have a report here called the total revenue by country and product line and I noticed that there are no filter set on this target report. That is what we are… what we want. Let's look at how this report looks like when it's run. So, I see my total revenue based on the region, country, retailer name, and the product types. So, now I go to set up the drill through definition, which is going to leverage the dynamic drill through capability. We have to direct it to the target report and total revenue by country with the report that we were looking at. At this stage, I choose my action which will be to run the report using dynamic filter. Notice no target parameters are present here, because the report didn't… target report didn't have any parameters. So, my drill through definition is set. I go to my source which shows the top three retailers and prior year to date. This is how it looks when it's run. Now, the countries, retailer names, I have revenue as my measure and product types on the top. If I go to Netherlands and retailer *extra support[Phonetic]* and I drill through... so, I have… you see in my Go To page, I have the drill through definition I just set up. If I run it, I do get my results filtered based on the camping equipment data item. So, the next capability which is drill through definitions now supported by the member properties. So, you can… what it means is coming from an OLAP source, you can choose the member property that you want to use in your drill through. So, an easier way to appreciate this capability is the fact that today if you want to drill through from an OLAP source or a dimensional source to a relational source, you have to make sure that the business keys on both sides are conformed, but what do you do if that is not the case? Well, that is when the member properties can be useful and I will show you how. So, before we go into the demo, these are the member properties that you are going to see which you can use to drill through from a dimensional source to a relational source. Now, we will focus on the top three, because the top three are the ones, which will be more in use, the bottom four are for more advanced use, and let's take a look at the demo now. So, this is the report which gives details on order method and the first iteration we are going to show you how it's done today if the business key is conformed on the target side. So, notice that I have

gone to my order method query subject and I am going to choose order method key as the filter. Now, once again the assumption here is that the keys on both sides are conformed from between the source and the target. So, I save the report. This is my target report and I go to set up the drill through definition, choose my target report. Now, I have to do the mapping to be able to satisfy that parameter that I set and I map my order method type level to it. Notice that the target parameter is expecting type number. I go to my source report, which is a dashboard report. It is giving me details on the order method type and regions, revenues within them. I go to the order method type web *between… within[Phonetic]* America's, choose the drill through definition that I created, and let's look at the view target mapping. So, notice that the drill through service is passing 605, which is a number which corresponds to the order method key parameter name and here is my final result for drill through. Once again the business keys were conformed, so I was able to pass a business key to the right parameter. Okay. So, what happens if I do not have my keys conformed and I am coming from a dimensional source to a *[Inaudible]* target. So, I am going to disable my old parameter, just assuming that the keys were conformed and to create a new one. I am going to choose the order method data item directly rather than going to the… or method key. I have named it order method caption, because I know that I will be able to use a caption to filter, because that is one of the properties that drill through service lets me use. We are drilling through now. So, move back to my drill through definition and I will edit it accordingly. Go to the target and I have got the new parameter available here and it is expecting type text. I will do the mapping and notice the source metadata item properties drop down. That is where I will go and now I don't want the default which is passing the business key; I will choose the member caption. So, I will pass the member caption within drill through to my target. I will go to my source again, same… very same cell, I will drill through, choose my drill through definition and view the mapping. Notice I am passing caption because that's what my parameter… target parameter wanted. I will run the drill through and my results are filtered based on that caption which was web. So, now let's take a look at drilling through from PowerPlay to Cognos 8 as well as some of the… some of the points surrounding the migration of a drill through application. First, we will take a look at drilling through in series 7, a recap of where you had to make configurations changes in order for the series 7 to Cognos 8 drill through to be successful. What happens after you migrate your series 7 drill through application to Cognos 8 and finally we will take a look at moving your drill through application to updated Cognos 8 drill through methods. So, in Series 7 when you were drilling through from PowerPlay to Cognos 8, your drill through targeting on the Cognos 8 side had to be defined in the PowerCube. So, this was set up in the model and when you built your cube, the drill through target would be embedded within the model. So, you can see in the screen capture on the left, we have a great outdoor salesdetail.crr. So, this is your Cognos 8 report; the path and the extension really not relevant to the drill through application. You just have to make sure that in Cognos Connection you have a Great Outdoor Sales Detail report. The middle screen capture is a Report Studio report and the filters that need to be created within that report. So, when you are drilling through the Cognos 8 Report Studio, you could have a potentially large number of filters that are required in the report. You really have to have a filter defined for every level within the transformer model and the PowerCube that you are going to allow your end users to drill through. So, the nine or

ten filters that we have defined in this Report Studio report is a very low number, because we have a small cube with a small number of levels. You can imagine how many filters you would have to define in the target report if you had a very large cube with many levels and dimensions. So, this could be quite a large task in order to create all of these filters. The third and final screen capture on this page is the PowerPlay Enterprise Server Administration Configuration. So, here you have to define the Cognos 8 server that contains the drill through targets. You have to enter the search path of the folder in Cognos Connection that contains the drill through target and the third option is the drill through assistant and this helps the drill through application developer to determine the filters that are required on the Report Studio target report. Once you have these target reports created, all the filters are created, you can disable the drill through assistant so that this page is not shown when your end users in production are drilling through PowerPlay in Cognos 8. This is just… it's an assistant that is used in the beginning process. So, after you migrate from Series 7 to PowerPlay 8, all of the settings that you had defined in Series 7 will carry forward into Cognos 8. So, you can see the two screens captures here and the drill through information between the two is virtually identical. So, you will see at the screen capture on the right, you still have your PowerPlay cubes, drill through enabled, the target still exist on the series 7 side. This is correct since when we do the migration, we are just taking all of the settings from the Series 7 cube and we will bring those over to Cognos 8. So the Series 7 setting was to drill through to a Series 7 target and you can see at the bottom, all of our Cognos 8 information was also migrated over, which means when you drill through from the PowerPlay Studio package to a Report Studio report that was defined in the model of the Series 7 side. All those filters that you had created will still be brought over and will still apply to that drill through. So, you won't lose any of your work that way. So, the good news is in PowerPlay 8 administration, it's very easy to update the cube to cube drill through to point to a Cognos 8 package, which will allow the target to open a PowerPlay 8 as opposed to the target being a series 7 PowerCube. So, the couple of steps you would need to do - in PowerPlay Administration, you would disable the drill through for PowerPlay cubes and enable the drill through for PowerPlay Studio packages. So, you have to add the search path for the folder that contains those packages. Once we have this configured, the next time we do a cube to cube drill through, from this cube, the target will open in Cognos 8 PowerPlay as opposed to going back to PowerPlay of the Series 7 side. So, more good news. As mentioned in the last slide, all those filters that you have created on the Series 7 side, those are still going to apply on the Cognos 8 drill through application. So, you can see that - as the screen captures here the top screen capture is drilling through from PowerPlay Enterprise Server on the Series 7 side to Report Studio, you could see the $319 million is carried over to the Report Studio report without having to make any changes to the reports in PowerPlay Studio or Report Studio, the *box[Phonetic]* screen captures they will carry over the same drill through filters. So, let's take a quick look at some of the migration of the drill through. So, here we have a very basic report that was migrated from Series 7 in PowerPlay Studio. We are going to click on the intersection point of golf equipment in Americas. We will do a drill through now and we have two drill through targets that will appear. The first one is a Series 7 PowerCube as defined in the transformer model. The second one is the Report Studio report that we had also defined in the model and that contains all those filters. So, let's drill through to the other

PowerCube and you can see here we open up in Series 7 PowerPlay. Again this is expected since all the settings are migrated over from Series 7 and as you can see here, the value is correct. So, all the filters were passed appropriately. So, we close this. Let's go back to Cognos Administration now and we will make some changes to the configuration so that we… when we do our cube to cube drill through, we are going to open in PowerPlay Studio as opposed to Series 7. So, I was drilling through from the Go Form detail cube or package. So, we scroll down to the bottom on the… from the drill through information. We are going to disable cube to cube drill through. Once that is disabled, you can still leave your PowerPlay web target there if you want. If you want you can also delete it; it really doesn't matter as long as PowerPlay cubes has been disabled. We will now enable PowerPlay Studio packages. In the PowerPlay Studio package folder, you want to paste in the search path to the folder that contains your drill through target. Okay. So, now if we go back to that same report that we had launched before, we are going to click on the same intersection, golf equipment in Americas, so just over $319 million. So, now when we drill through, we are still going to see two targets named the same, but you can see that the first one, the Go Form detail, the target is PowerPlay Studio as opposed to PowerPlay Enterprise Server. So, let's click the Go Form detail and you can see now we open up a PowerPlay Studio as opposed to PowerPlay Enterprise Server and we have the same filters applied and same value. So, you can see this was very easy, this was one setting that was changed on the package level. If you know all of your drill through targets are going to exist in the same folder, you don't have to change it at the cube level; you can change it at a higher level such as at the folder level or even right at the server level within Cognos Administration. So, now we have seen what we get after we drill through or once we migrate our drill through applications from Series 7 to Cognos 8, once we know all of that's working, at that point we can take a look at maybe utilizing some of the new and approved drill through methods that are available within Cognos 8 that were not available to us when we were in the series 7 world. So, any new drill through target can be created using dynamic drill through. This means that you do not have to create any filters in the target report. The condition in order to get this to work properly is the level names in the PowerCube must be the same name as the columns in the target report. So, if we take a look at the screen captures, say in the products dimension, you can see product line, in that target report, you could see product line; so, they are named the same. Product type is named the same, product name is the same. So, what would happen here is when you do a drill through and either of these filters have been selected in PowerPlay Studio, as long as these columns are named the same then the drill through target will open and it will be filtered on the appropriate value without having to create any filters within the report, the target report. In order to set one of these up, you just go to the drill through definition, create a new drill through definition, the action, you want to choose run the report using dynamic filtering, and all you have to do is point to the target report and as I mentioned in the last slide, there are no filters required in the target report. The screen capture here shows an intersection point of just over $10 million in PowerPlay Studio and then the Report Studio report on the right, which contains no filters will automatically drill through on the correct *amount[Phonetic]*. Okay? So, now let's take a look at another quick demo and we will perform a dynamic drill through. Okay? So, we are going to launch drill through definitions wizard… window. We want to be based off the Go Form

cube package. So, we create a new one. We will call it dynamic drill through. Okay. So, now we are going to select our target. We want to select a report. Now, we want the target report to be the Great Outdoor Sales Detail, no filters. Okay. So, here we want the default action to be run the report using dynamic filtering and then we click Finish. Okay? So, now let's go back to Cognos Connection. We will launch a report based off of the Go Form cube. Okay? So, now here is that… the value… the same value that is on the screen capture. So, golf equipment, America's, 2007, Q3. So, again the value of just over 10.6 million dollars. We will click drill through. If you scroll down to the bottom, you can see the value here is just over 10.6 million dollars. The values add up. So, now we take a quick look at this report in Report Studio. Okay. So, this is the target report and if we go on, if we take a look at the filters, you can see we have no filters defined here. So, we have performed the drill through from PowerPlay Studio to a Report Studio report, the appropriate filters have been passed through dynamic filtering without having to create any filters on the Report Studio *cycle[Phonetic]*. So, that is a quick overview of your Series 7 migration and how you can bring that forward into the Cognos 8 world.