

Report on SharePoint List data using Data View Web Part

In this screencast, I will show how you can tap into any existing SharePoint List data and show it on any SharePoint page. In my example, I will take three existing Lists, namely the Customers, Orders and Order Details, to show this functionality. I will show all three Lists connected together to create a reporting solution.

This is a typical SharePoint Services Site. Currently, there is only one web part that is visible that is the Windows SharePoint Services logo. What I want to do now is to display my customer's data on this page. The customer's data is represented right now in terms of lists - I have the Customers list in the quick launch bar here, the Orders list and the Order Details list. Let us go ahead and take a look at each of these lists first. If I click on Customers, here is all my customers data, Orders here is the orders data for each customer, and Order Details has detailed information about each order. So once again what I want to do is on my main site, the home page of the Sales site, I am going to display the Customers, Orders and Order Details information. So in order to do that, what I need is a data view web part from SharePoint Designer.

I am going to go to Start → All Programs → Microsoft Office → Microsoft Office SharePoint Designer 2007. Let us maximize this window first. Now to work with any SharePoint site, the first thing I need to do is to open that site, File → Open Site. And now I need to put a URL of that site here. Let me grab the URL from here, making sure that the last default.aspx should not be in the path when I put it in the site name, so I am going to end it with the actual site name, which is Sales, click on Open, need to just authenticate, okay so it will open up my site.

Let me go into default.aspx page. As you know default.aspx page is the main page of every Team Site that you create, every SharePoint site I should say. It is loading up the Master Page right now. Okay, so now we have our default.aspx page, which is the main page of the site, of the Sales site, open in SharePoint Designer. Let me go ahead and make some room so that you can see more of SharePoint Designer, I am going to reduce the width of these Task panes here and a little bit over here too. Alright, I have a left web part zone and a right web part zone. The right

web part zone right is now filled with the Windows SharePoint Services logo. I am going to take this logo out, which I am assuming you will not need in production, so I am going to click on it and click on Delete, so now I have two web part zones to work with.

Also I am going to take this web part zone and move it to the bottom, right here, just so I can get more space to work with and let us rename the zone, double click, I am just going to rename it Middle. The other one, I am going to rename this one Top, and I will make one more zone and name that Bottom zone. Now to make a zone, I will need to go to Insert → SharePoint Controls → Web Part Zone and then double click it. Alright, so I have three zones right now. And the reason I made three zones is because I want to separate my web parts into each zone. Now granted you can put multiple web parts, either horizontally or vertically styled, you can put multiple web parts in a zone, but what I would like to do usually is try to separate them, if possible, for different functionalities. I will be putting my Customers information in the Top zone, so let us go started with that. It is tempting you right now to Click to Insert a Web Part here. You do not want to do that, not for data view web parts. The data view web parts, the way it works is you select a zone that you want to put a web part in, then you go to the Data View menu, up top here, and then click on Insert Data View. Now what that does is it opens the Data Source Library in the Task Pane on the right side here. Let me go ahead and take out this Apply Styles task pane to give me more space. Okay so here is all my information that I can put in as a Data View. There is lots of cool stuff you can do here such as going towards a XML file, pulling in Server-side scripts such as RSS feeds, going directly to a Web Service, going to a Business Data Catalog connection that you have created earlier, going directly to a Database through here. Now I am not going to do any of these things here because this screencast is geared towards showing your List data in the site. There are other screencasts that have been created and there are some others, which will be created, which are going to show other functionality, but in this one I am going to stay focused on showing the Customers, Orders, and Order Details data in this screen.

So first I need to go to the Customers → List → click on this drop down → click on this Show Data, here it is. I have all these different fields in 92 records altogether in these fields

to display in my page here. So I am going to select the fields that I want to display, for example CustomerID is must, CompanyName, and I will pick City, Country, and also put I will take the ContactName, so I will click on the ContactName, let me re-select these things. Okay, so I have five different fields right now selected. Now while I was selecting these, I had my Ctrl key pushed to keep them all selected. Once I select them, I go up here in Insert Selected Fields As and I will select the Multiple Item View. So, it is going to take all these records and at design time, at this time right now, going to push all the records out to my page, here it is, in the left zone.

Alright, now I am going to go down to the Middle zone and in here I am going to put a different web part and this web part, you guessed it, it is going to be the Orders data. So once again Data View → Insert Data View → going to go to Orders → Show Data. This time I will pick the OrderID, CustomerID, OrderDate, ShipCity, and ShipCountry. Again I will insert them as multiple item view. Here is my Orders data.

And lastly, I am going to go to my Bottom zone here, repeat the steps to go to Data View → Insert Data View → Pick Order Details this time → Show Data → pick the fields that I want. These are actually going to be the fields that I already selected. I will just take four this time actually. Once again Insert Selected Field Items As → Multiple Item View. Okay then, so it will put the Order Details data up on the page.

At this time I have the Customers, the Orders, and the Order Details data appear. Let us see how this looks in the web page. I am going to click on Save. It is warning me here and this is saying that I am going to mark this page as a customized page. This is a concept that came from the 2003 world as ghosting and not ghosting. At this point, it is saying that I am unghosting the page, which is I am marking it as a customized page. And I am going to take this page the default.aspx page and store all of its data and its structure and everything else in the database. I am going to say Yes, go ahead and do that. Okay, once that is done, let us go to the Sales site, I am going to refresh this page, here is my data, Customers, Orders and Order Details.

Now I can paginate through this data. It is showing me first 10 records I can click on this arrow to paginate through, show me more records, 11-20, 21-30, same thing with Orders, and the same thing I can do with Order Details table.

Now what will be nice is to show a customer and to show only his orders and only and then select an order from that customer's order and get the details only for that order. Well, all that stuff is possible; in fact, that has been possible since the previous version of the product, 2003, I am going to go ahead and do that by connecting these web parts together. Let me do that through SharePoint Designer. So going back to SharePoint Designer → I am going to select my first web part, the Customers web part → right click on it → click on Web Part Connections → then I am going to say Send Row of Data To, that is correct, click on Next → Connect to a Web Part on this page, that is also correct. I am going to connect this Customers web part to the Orders web part → Next.

Now, I need to make a relationship here within a column saying, which data that appears in the Customers list is relational to the orders data. So, I am going to make a link on the CustomerID field. Let us see, here is my CustomerID field, and let us pick the CustomerID field here. Okay, so the CustomerID field in both the tables, the Customer table and the Orders table, is the one where the connection is going to take place → Next.

Now, I need to make a hyperlink so when I click on that record in the hyperlink in the Customers table the relational data in the Orders table would appear. I am going to make CompanyName the hyperlink → Next → and Finish.

Alright, as you can already see that there are hyperlinks on the Customers field, now I am going to go to the Orders table here and make a connection from the Orders to the Order Details. Now before I do that, let me fix up this data. The Order ID, obviously, should not be in a currency format, the way it is showing right now. So, I am going to just click on the arrow that appears when I hover over a record, and in the Number Formatting Options → I will remove the 1000 separator, okay, it looks much better. Same thing I am going to do in the Order Details table, Number Formatting Options → Remove the 1000 separator, it looks much better now.

So, now once again, just like I did before, I am going to make a web part connection by right clicking on the Orders web part → clicking Web Part Connections → and it is showing me that there is already a connection that is coming from the Customers web part to this web part, to the Orders web part. I do not want to

modify this one, so I am going to Add a new one → Next → Connecting to a Web Part on this page → and that is right. Now I am connecting from Orders to Order Details. Alright, the relationship that I want to make is going to be on the OrderID field, here it is OrderID, I am going to pick the OrderID in the Orders field here in the Orders web part. Alright, once the connection is made, click on Next, and the hyperlink that is correct, I do want the hyperlink in the OrderID, so when I click on that OrderID in the Orders web part, all the Order Details in the Order Details web part should appear → Next → and Finish.

And as you can see, all these are hyperlinked too now. Now I am going to save this page and go back to Sales page, refresh this page, alright let me explain this error. This error is popping up because of security time out has happened, the security validation time out and that is a good error. There is no problem with that. I am going to refresh this page and just going to refresh the cache, and refresh everything in memory, and this is going to show me now my first customer, which is ALFKI CustomerID is going to take that id and show me orders only for that customer.

Alright and it is going to take the first OrderID, which is 10643 and it is going to show me only the Order Details for that order. If I want to change this information, I pick a different customer. Let me go ahead and page to a new record. Let us click on the CONSH, Consolidated Holdings, alright so I am showing the Consolidated Holdings records. And if I click on the 10462, okay, now the Order Details are showing me just that order.

It is that easy now to use a data view web part to show the information that is in your list and then to make a connection from web part to web part to show certain data, filtered data. In a separate screencast, I will show how to make this data look even better, so how do you put formatting around this information so to make it look more presentable, also how do you edit this information, now this is all Read-only data, how do you edit the information that is in your list using these web parts. I will also show that in a different screencast, so look out for those screencasts on SharePoint-Screencasts.com.