Procedure to Create Custom Report to Report on F5 Virtual Services

Summary:

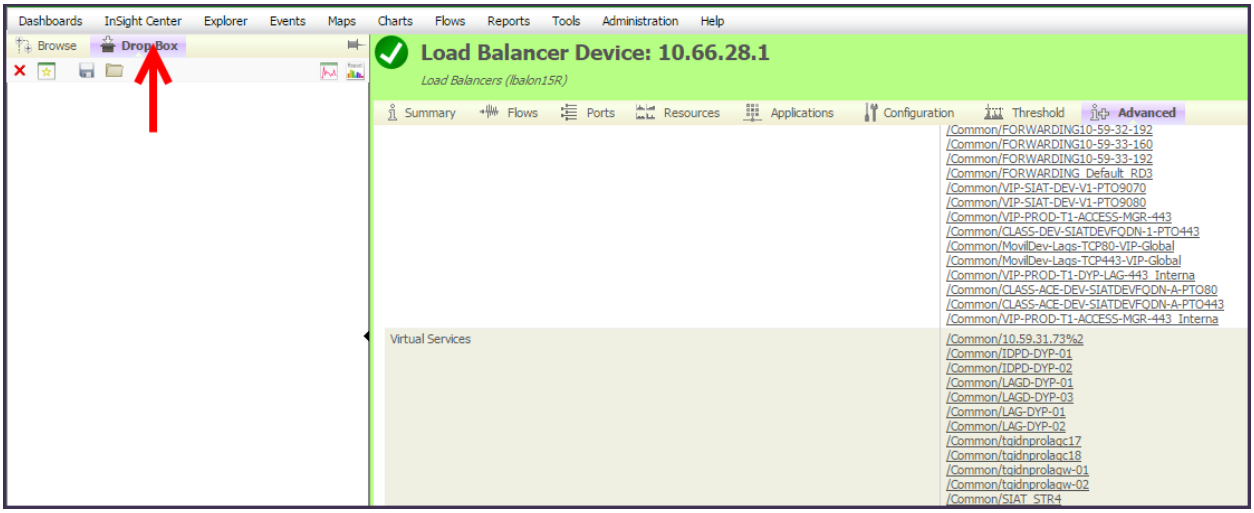
The purpose of this Application Note is to provide a procedure to report on F5 Load Balancer Virtual Services. The report uses Entuity's Report Builder utility and requires Entuity 14.5 or later. The report will be configured to print out as an inventory table report. The output of the report contains the following fields:

- Service Name
- IP Address
- Load Balancer IP address
- Real Server Name
- Local Pools associated with the Service

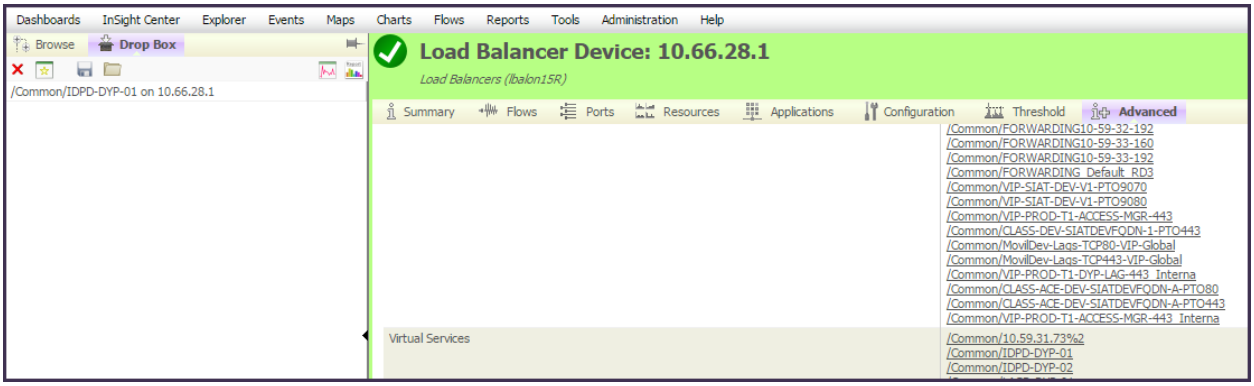
The report controls all for the selection of one or more load balancers and the ability to report on any or all of the Virtual Services.

Procedure:

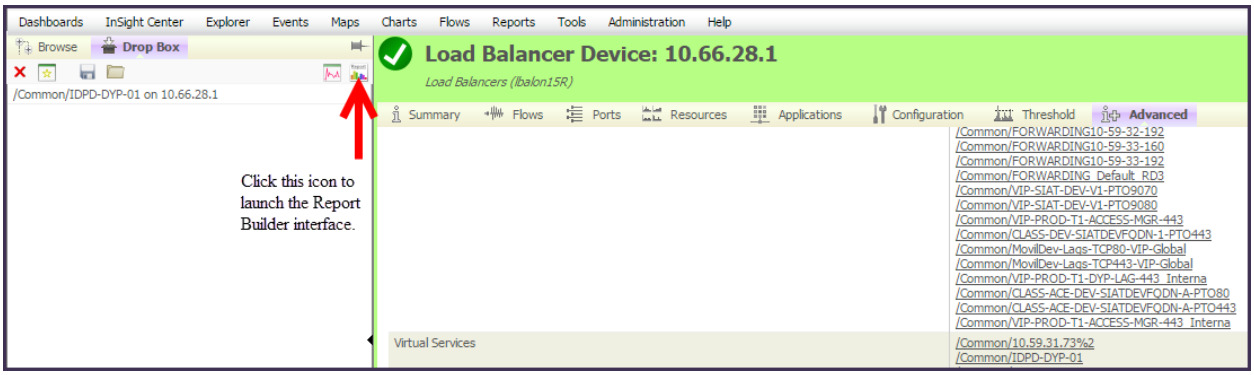
1. Log into the Entuity server and select an F5 Load Balancer with the Explorer. Click the Advanced tab and scroll to the list of Virtual Services. In the left pane, click the icon labeled Dropbox to expose the Dropbox.



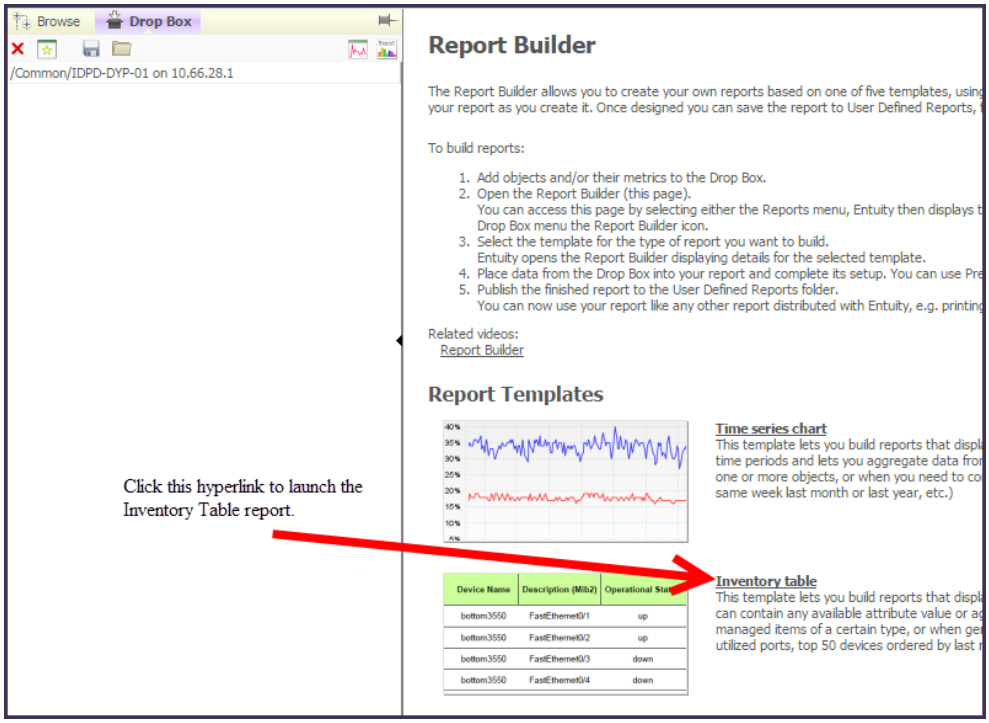
2. Drag any of the Virtual Service names into the Dropbox.



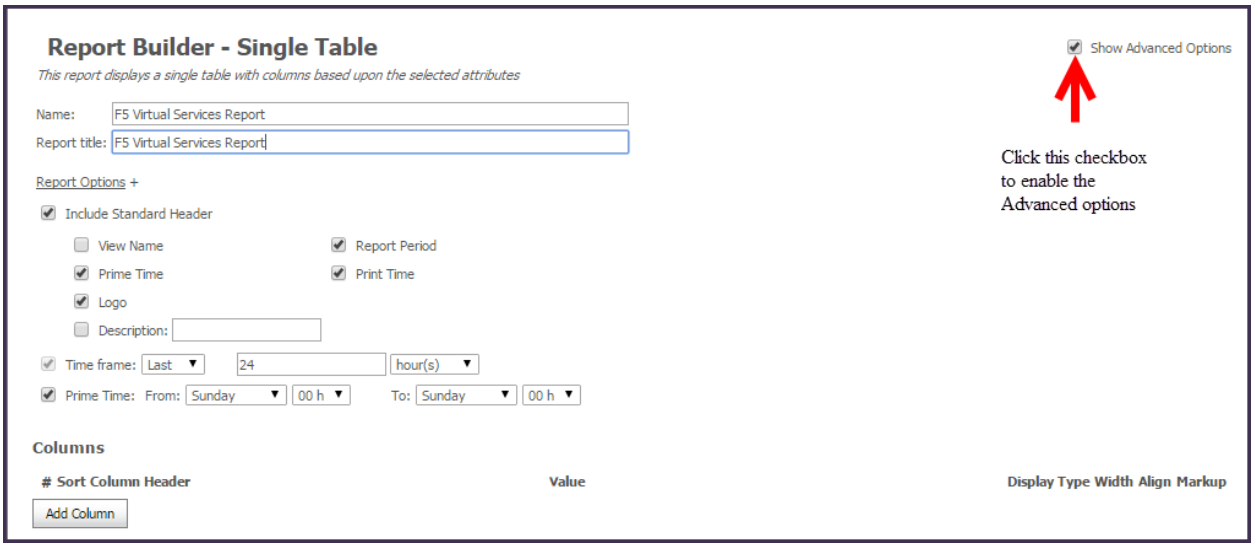
3. Click the Report Icon in the left window to bring up the Report Builder interface.



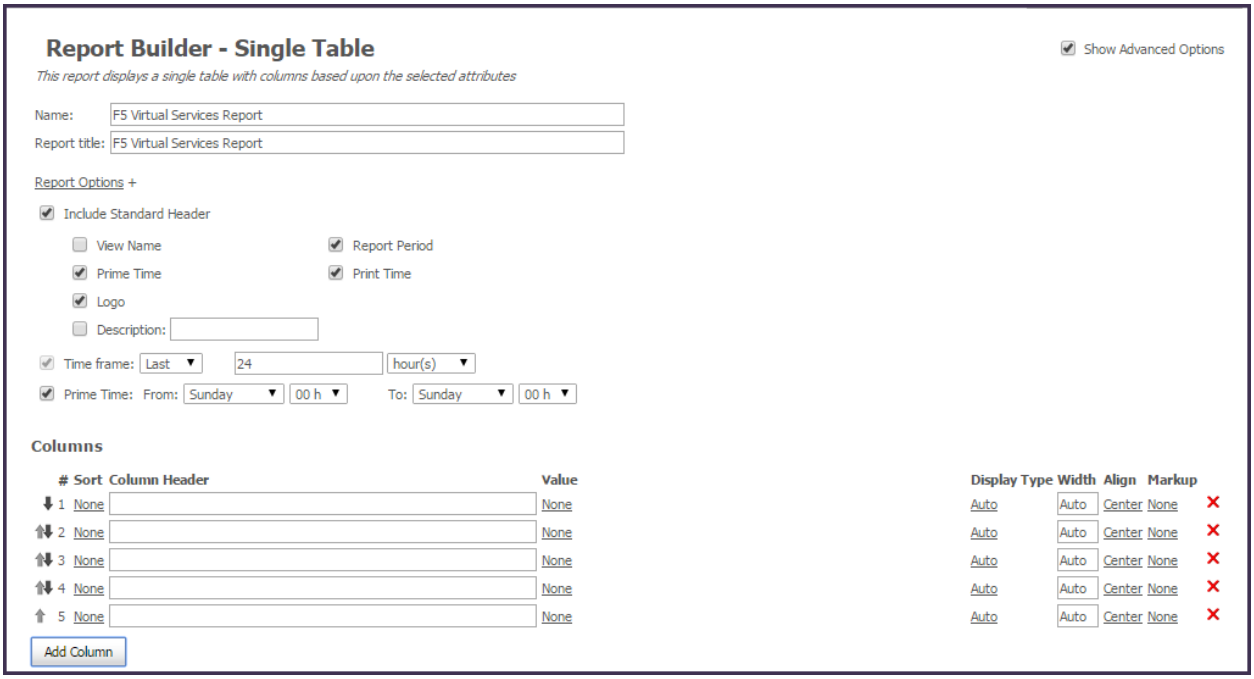
4. Select the Inventory Table report template.



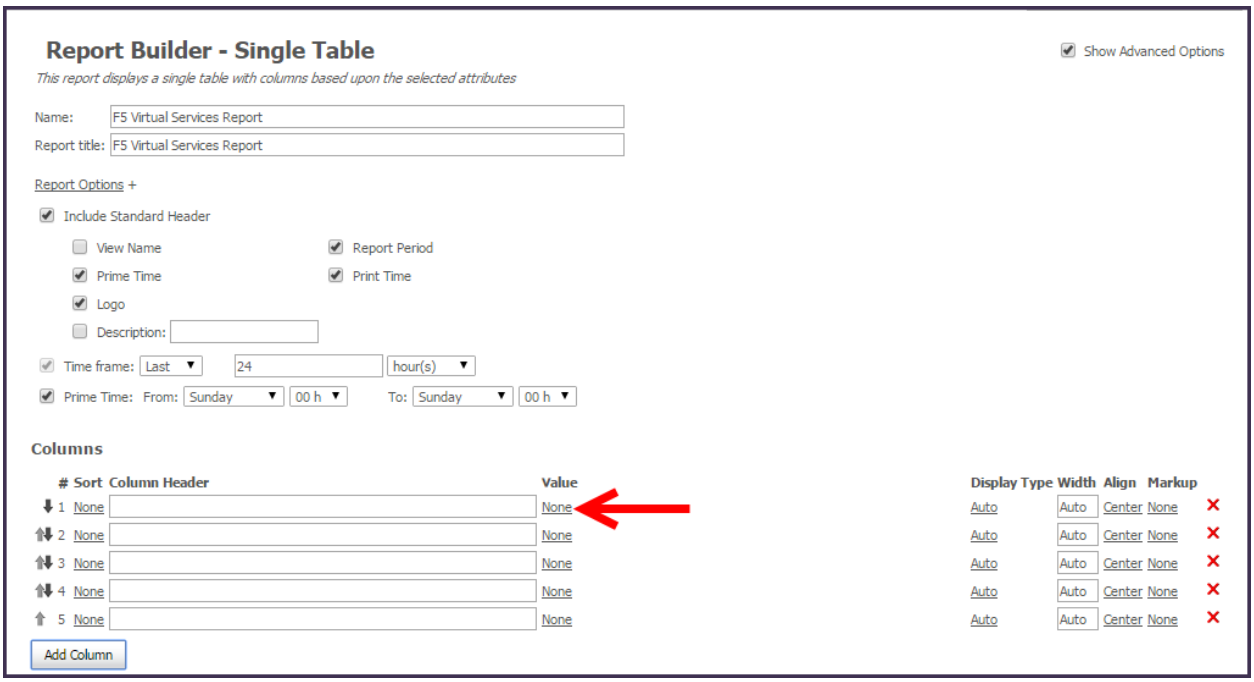
5. Click the Show Advanced Options box in the upper right corner of the page to enable the advanced options. Enter the name of the report and the title of the report.



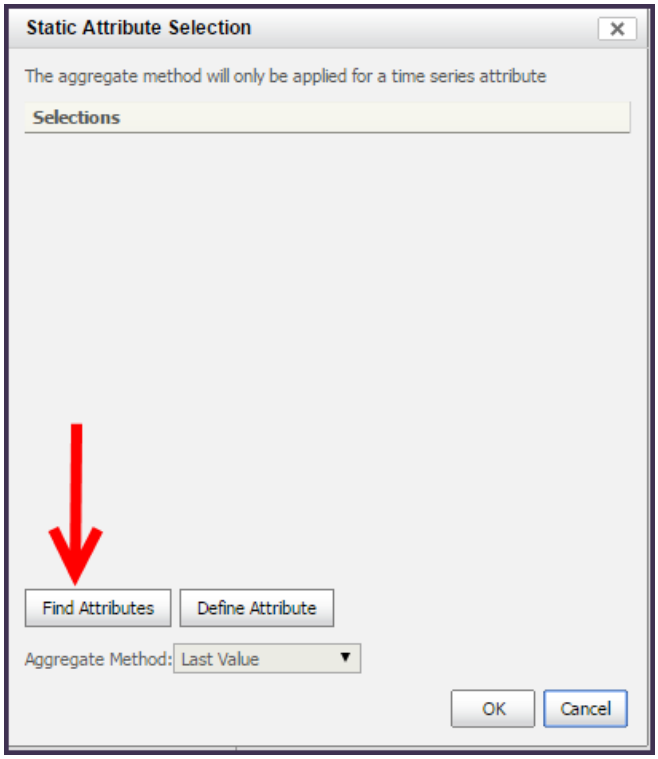
6. Click the Add Column button 5 times to add the columns to the report. The report template should display 5 columns with no information.



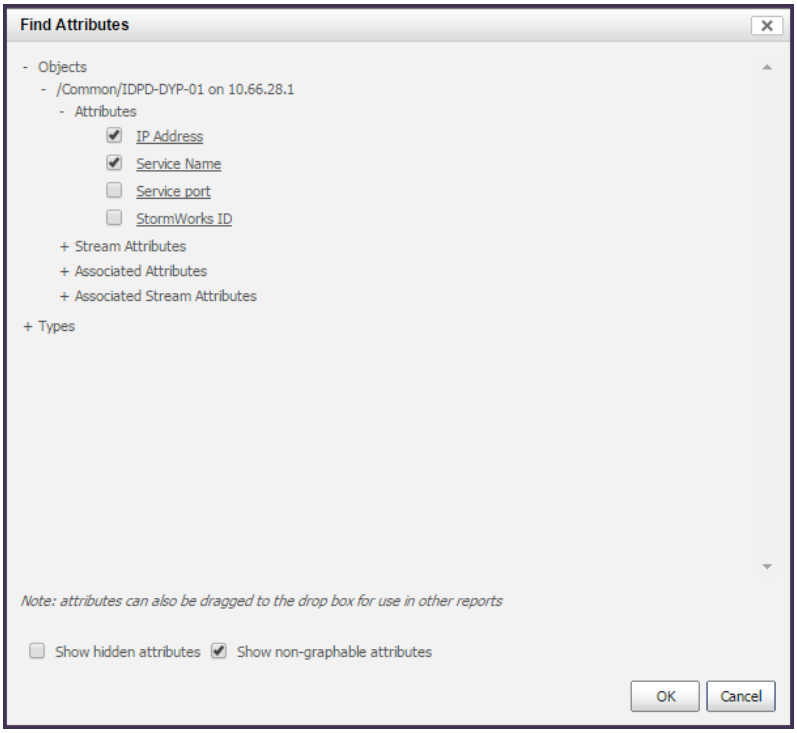
7. Click the hyperlink labeled None in the Value column for column 1.



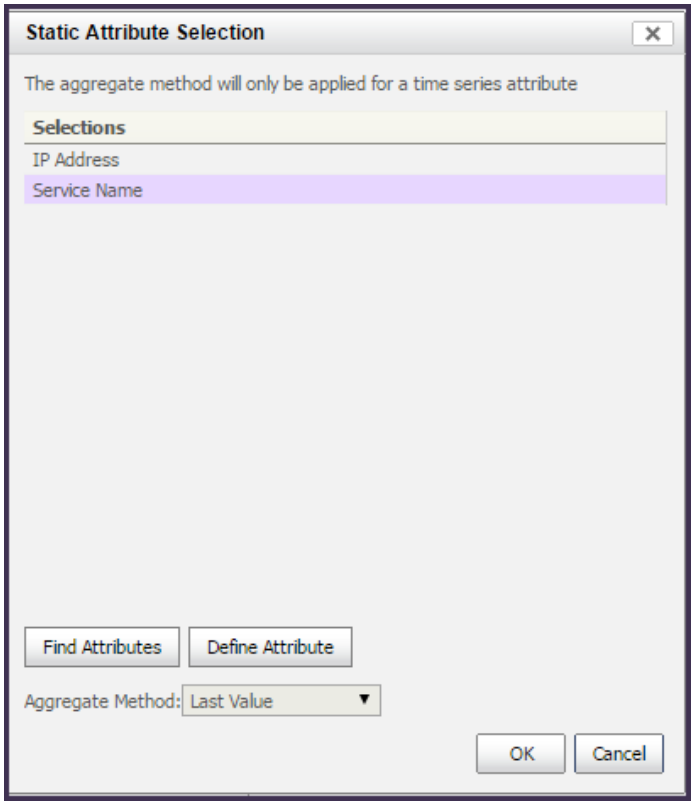
8. In the Pop-up box, click the Find Attributes button.



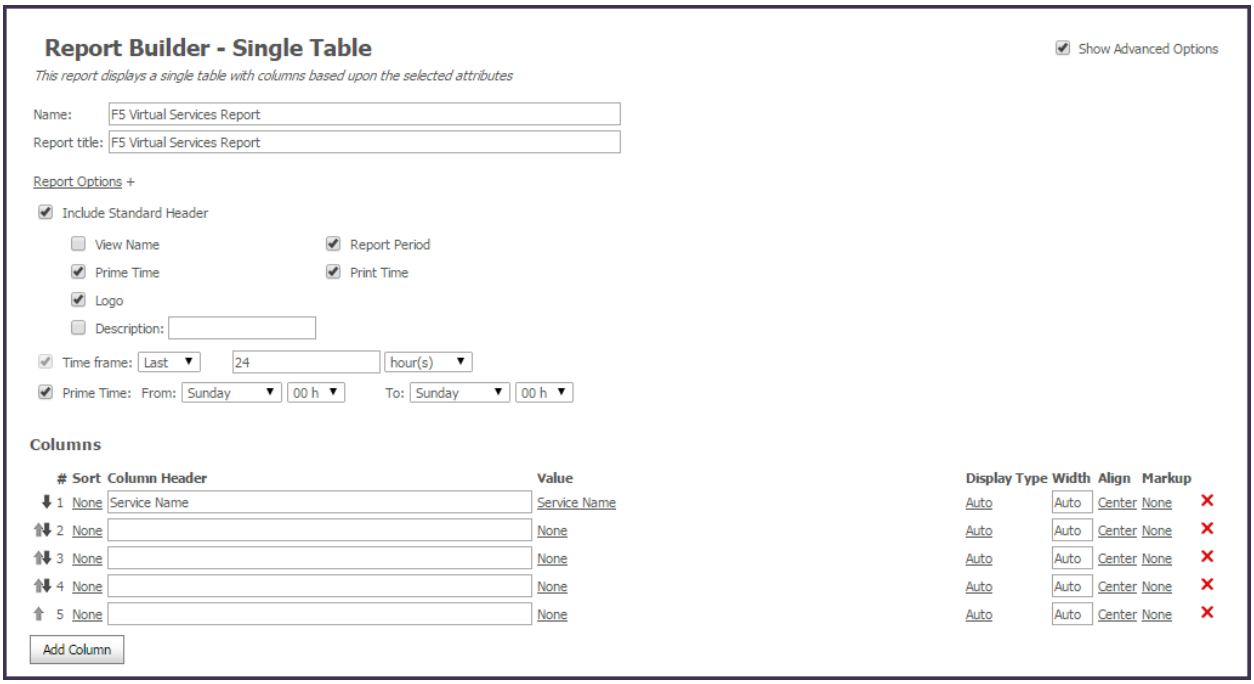
9. In the next window, click the + sign to open the virtual service object. Then click the + sign to open the Attributes. Click the checkboxes next to IP address and Service Name to select them. Click OK.



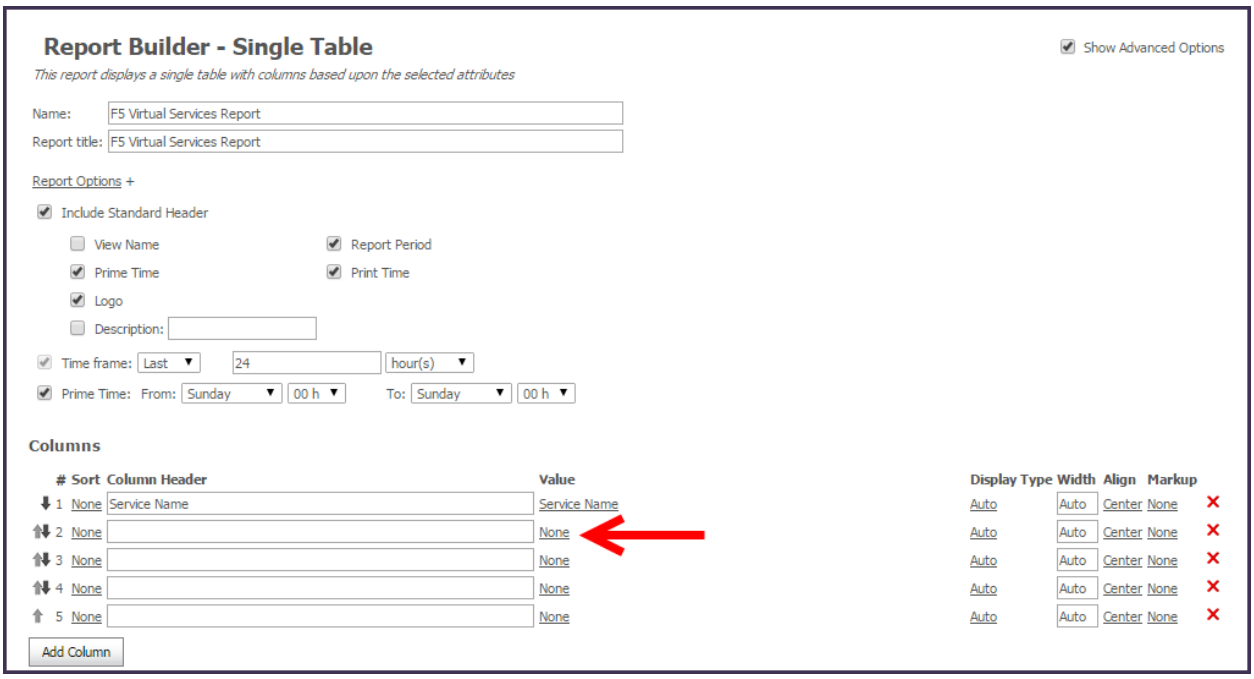
10. Highlight the Service Name attribute by single clicking it.



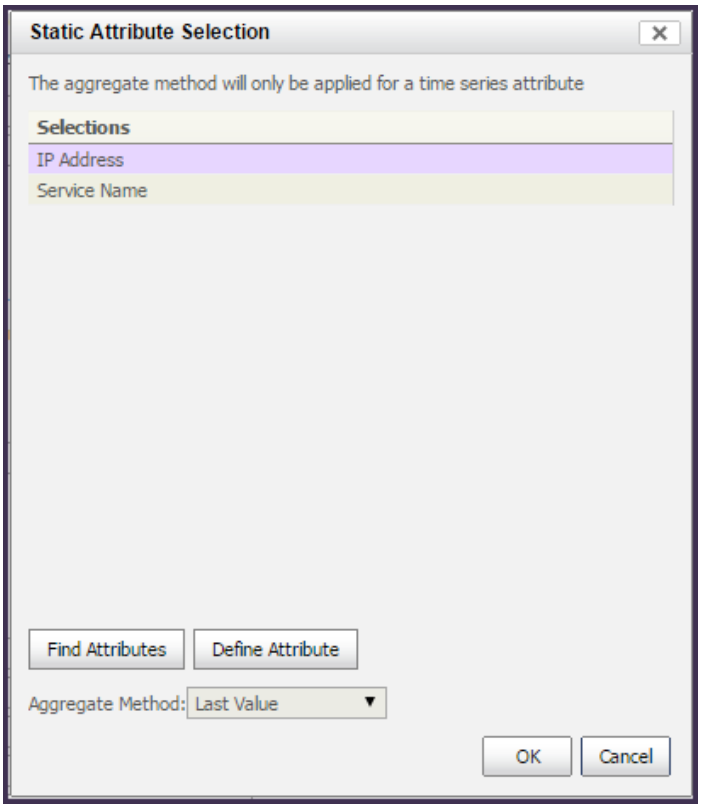
11. Click the OK button to place the attribute into the report. The Service Name attribute is now in column 1 of the report.



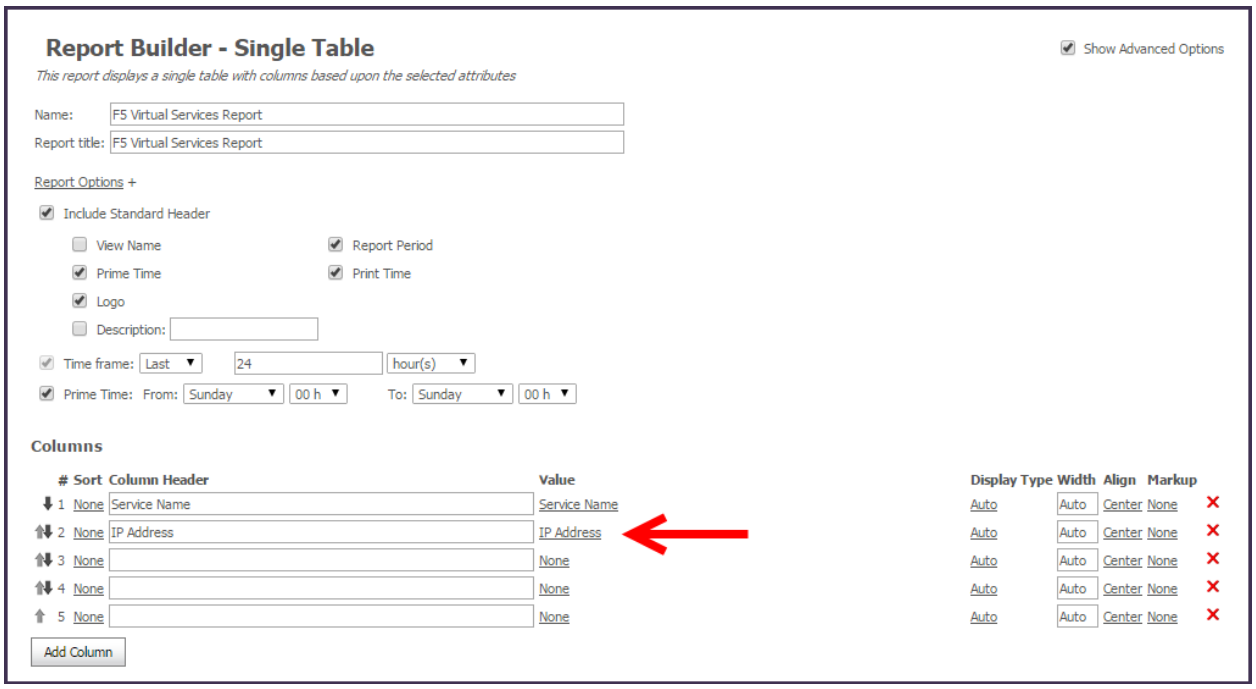
12. Click the hyperlink labeled None in the Value column for column 2.



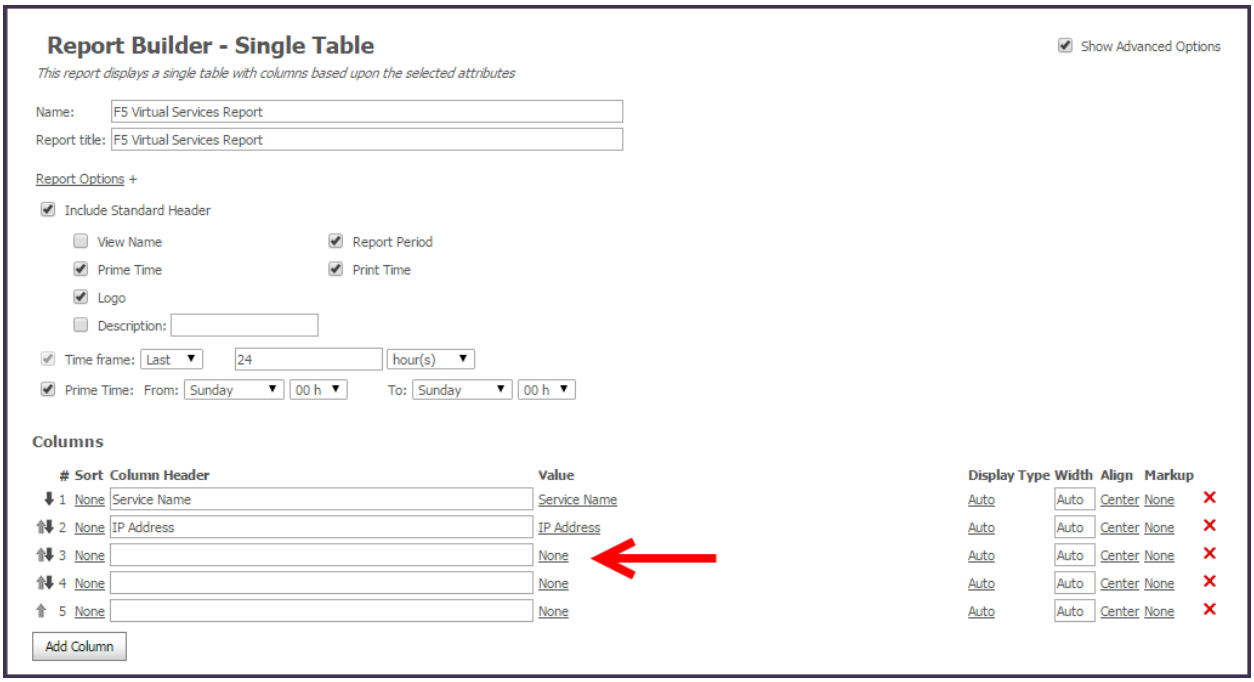
13. Single-click the IP Address attribute to select it.



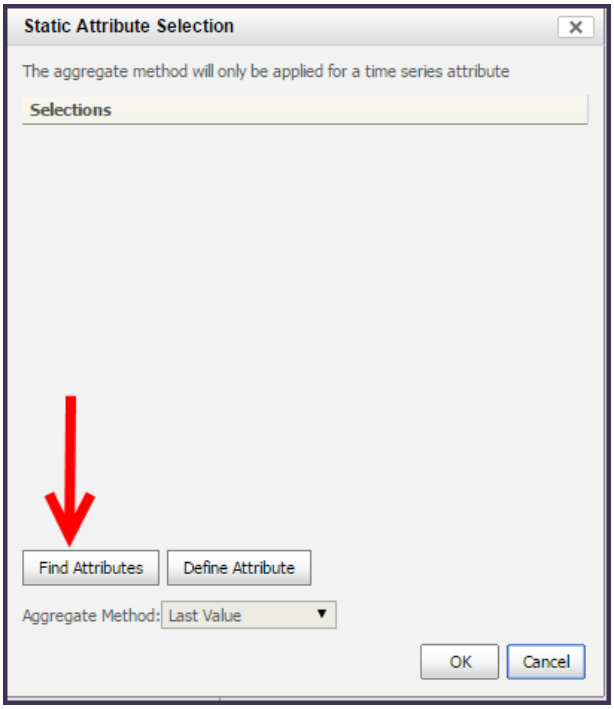
14. Click the OK button to place the attribute into the report. The IP Address attribute is now in column 2 of the report.



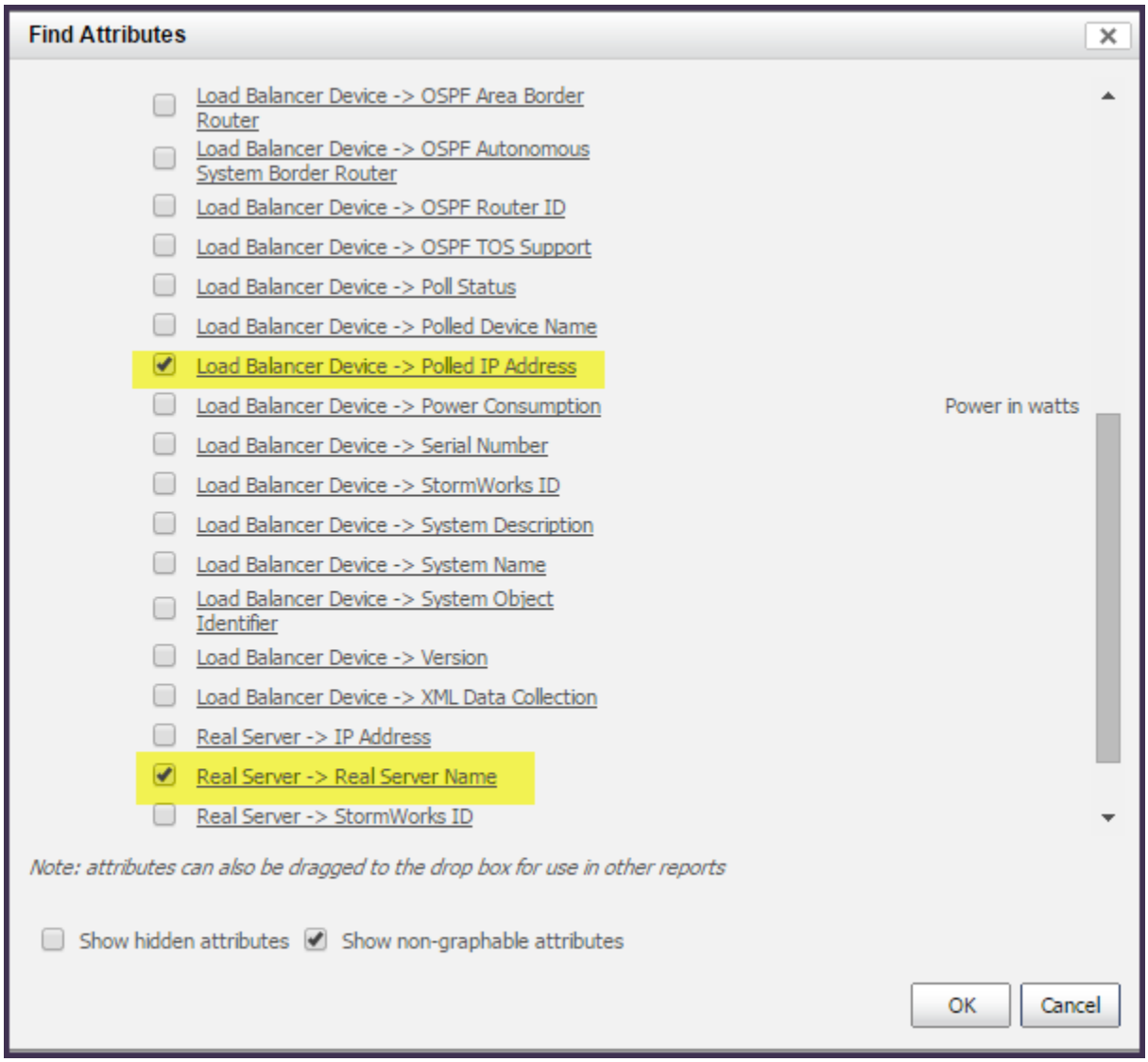
15. Click the hyperlink labeled None in the Value column for column 3.



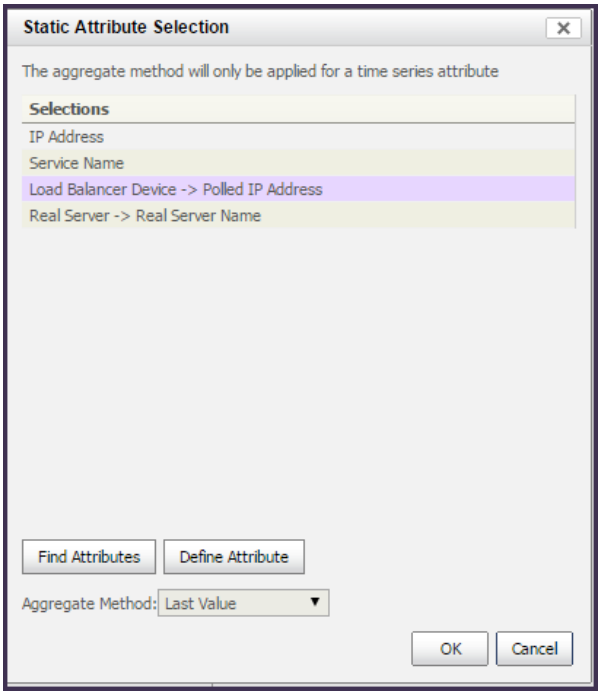
16. Click the Find Attributes button to open the Attribute selector window.



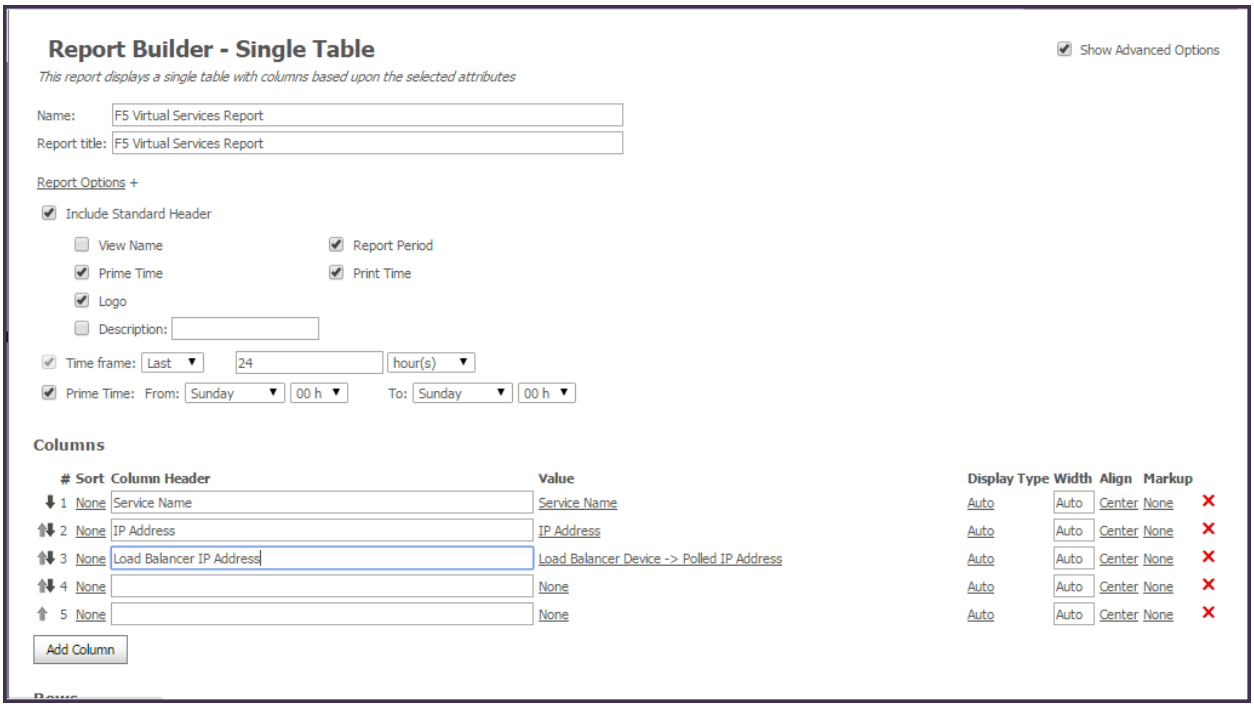
17. Click the + sign to the left of Object. Click the + sign to open the Virtual Service attributes. Click the + sign next to the Associated Attributes to open the associated attributes for the Virtual Service. Scroll through the list of attributes. Select the Load Balancer Device -> Polled IP Address attribute and the Real Server -> Real Server Name Attribute. Alternatively, the device name may be selected instead of the polled IP address by selecting the Load Balancer -> Polled Device Name attribute. Click OK after selecting them.



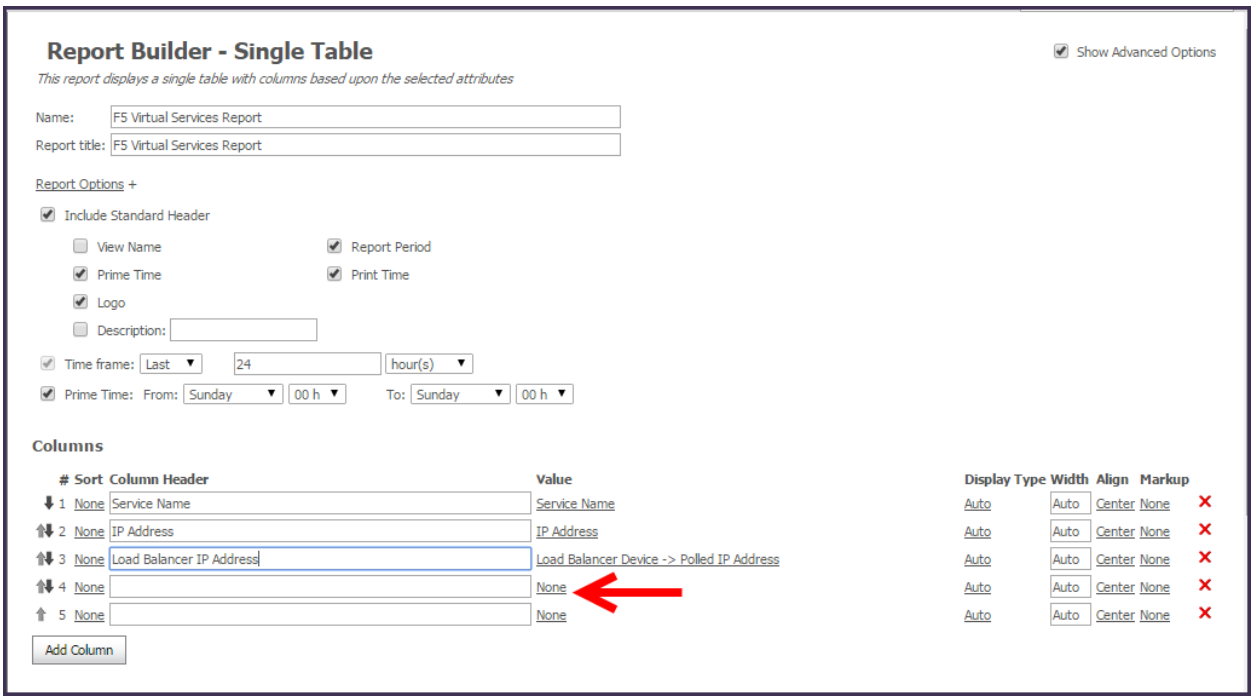
18. Single-click the Load Balancer -> Polled IP Address attribute to select it.



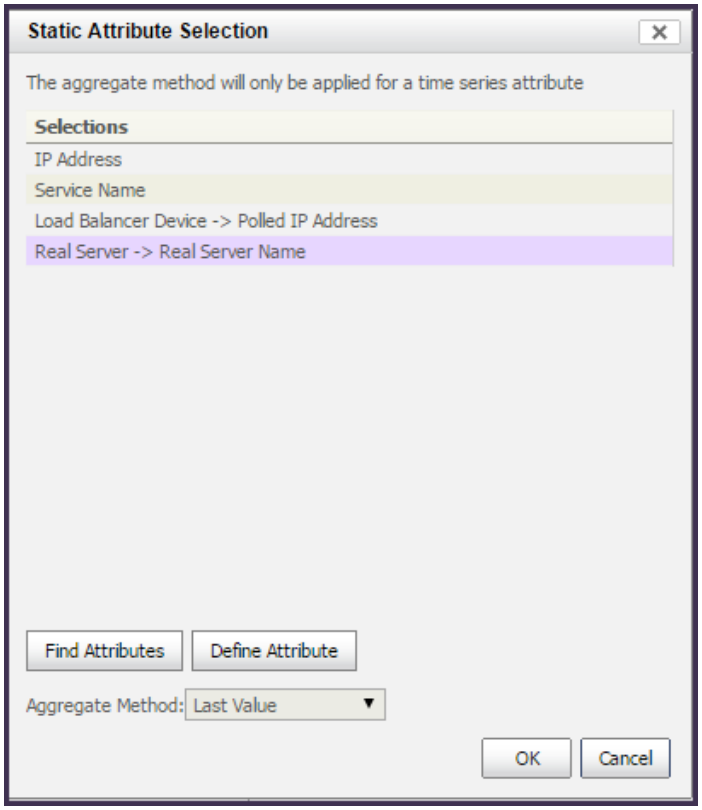
19. Click the OK button to place the attribute into the report. The Load Balancer -> Polled IP Address attribute is now in column 3 of the report. The description for the Column Header field may be changed. For this example, it has been changed to Load Balancer IP Address.



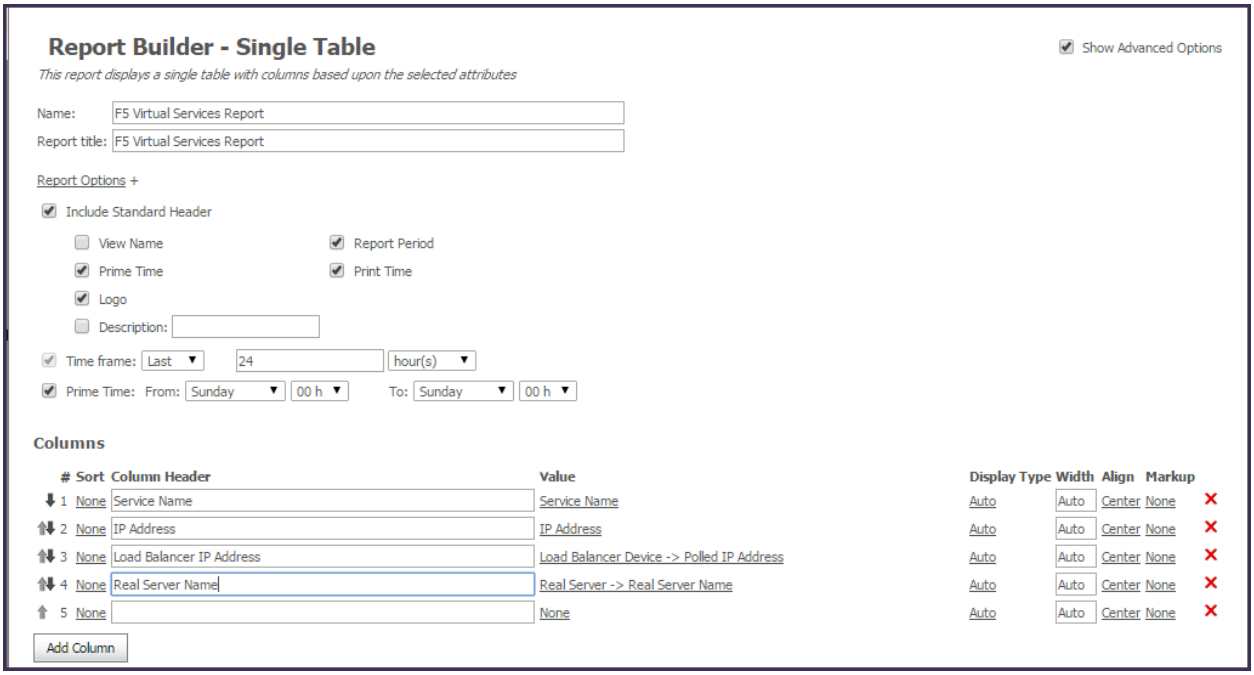
20. Click the hyperlink labeled None in the Value column for column 4.



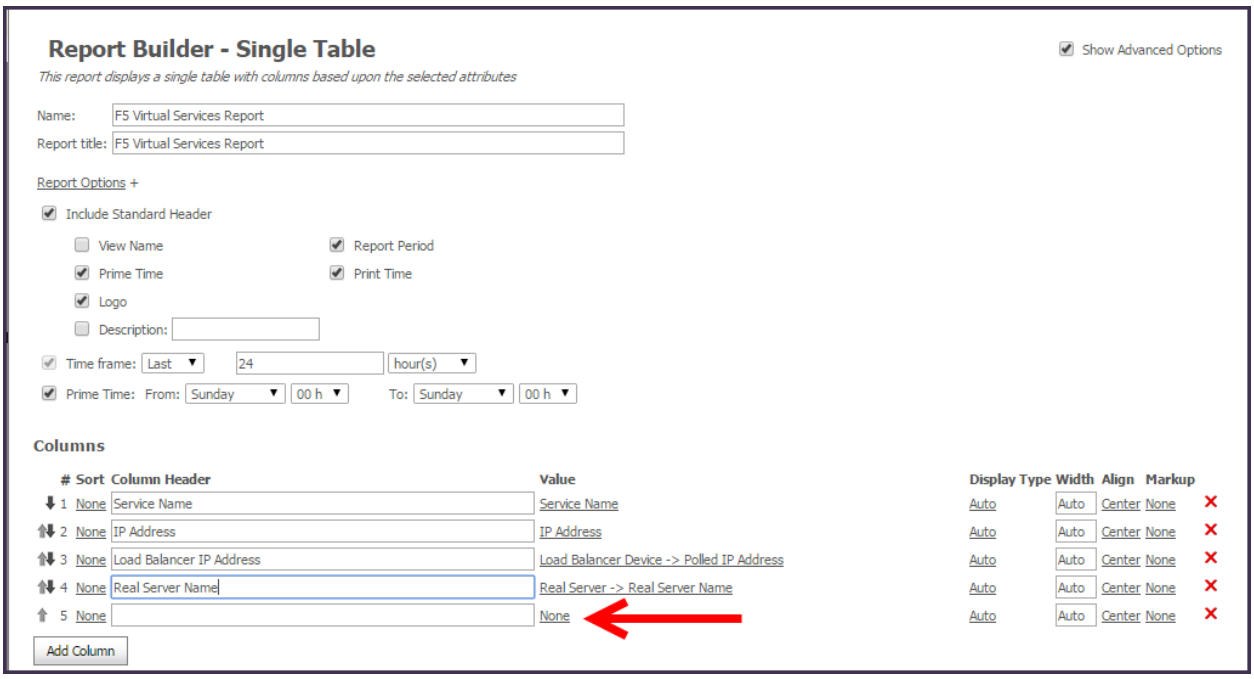
21. Single-click the Real Server -> Real Server Name attribute to select it.



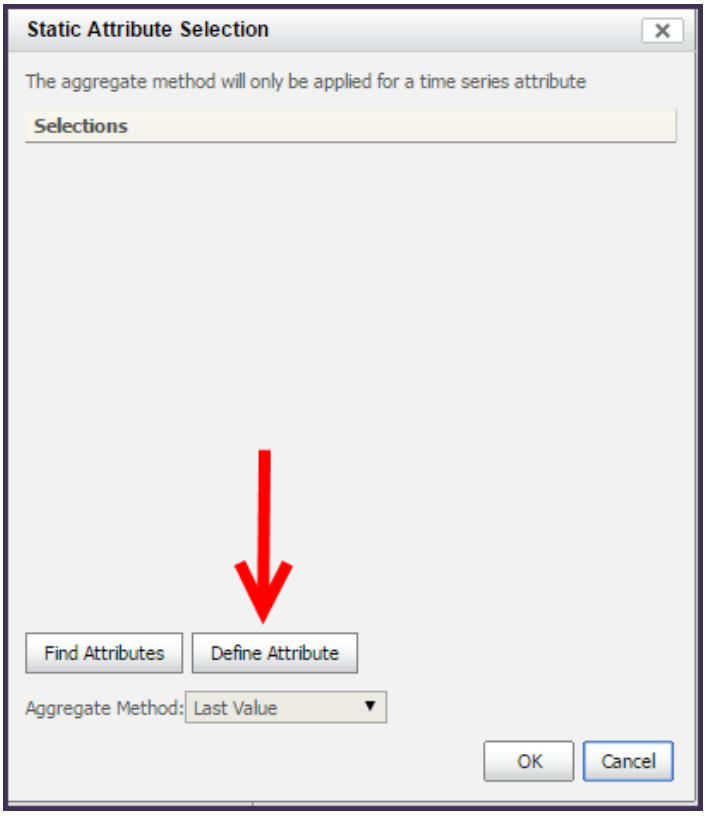
22. Click the OK button to place the attribute into the report. The Real Server -> Real Server Name attribute is now in column 4 of the report. The description for the Column Header field may be changed. For this example, it has been changed to Real Server Name.



23. Click the hyperlink labeled None in the Value column for column 5.



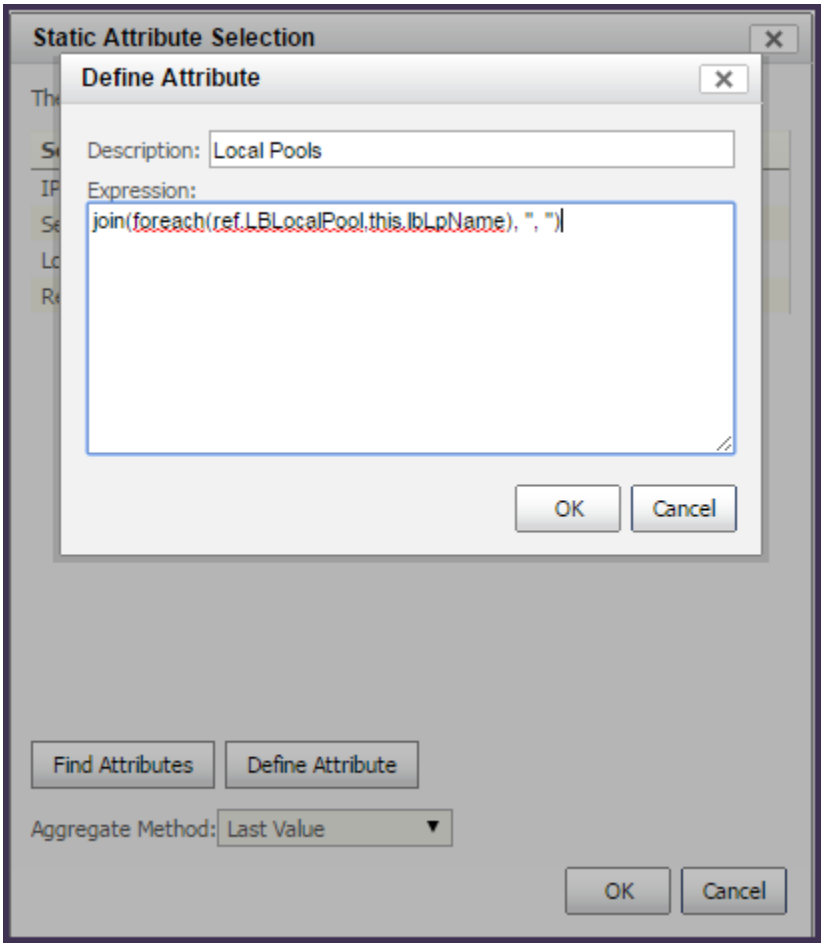
24. Click the Define Attribute button to define a new attribute.



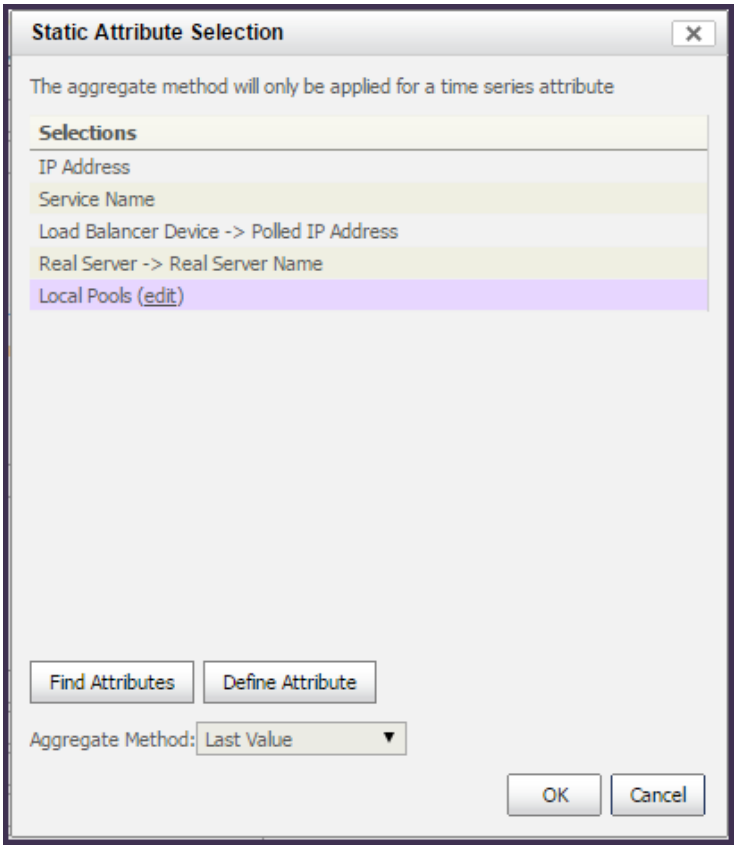
25. Enter Local Pools for the Attribute Description. This will be the default name used for the column header. Copy/paste the following into the Expression window:

join(foreach(ref.LBLocalPool,this.lbLpName), ", ")

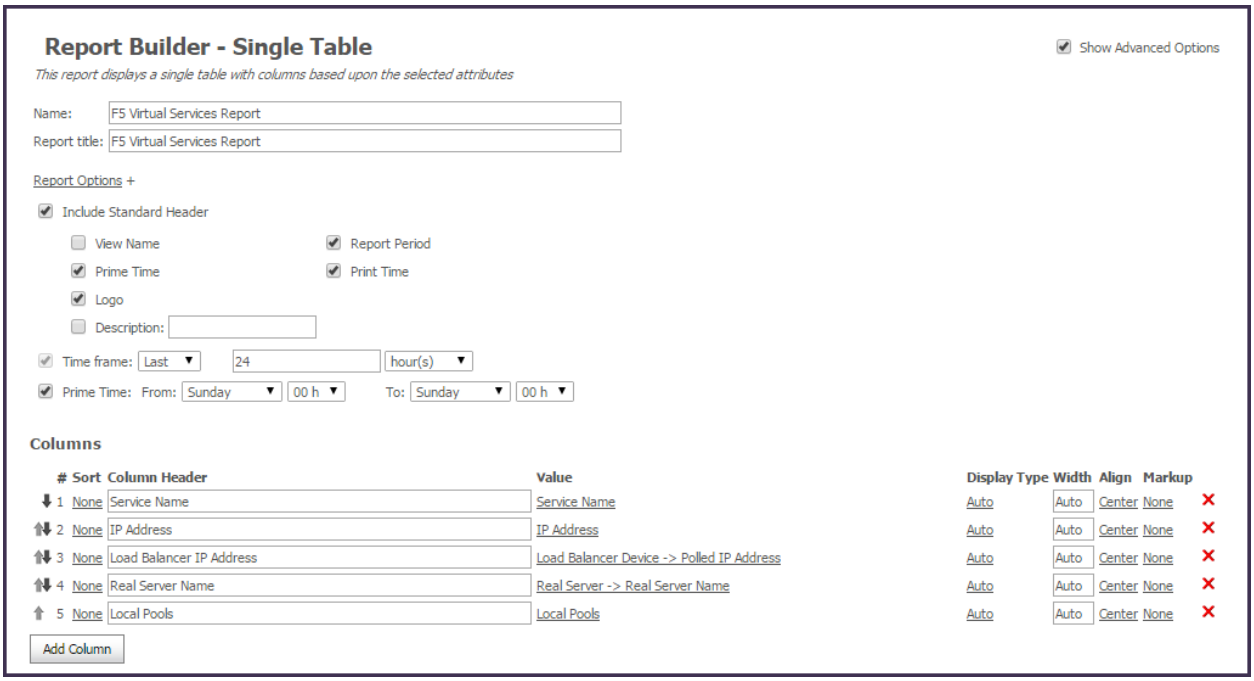
The Window should display as in the screenshot below.



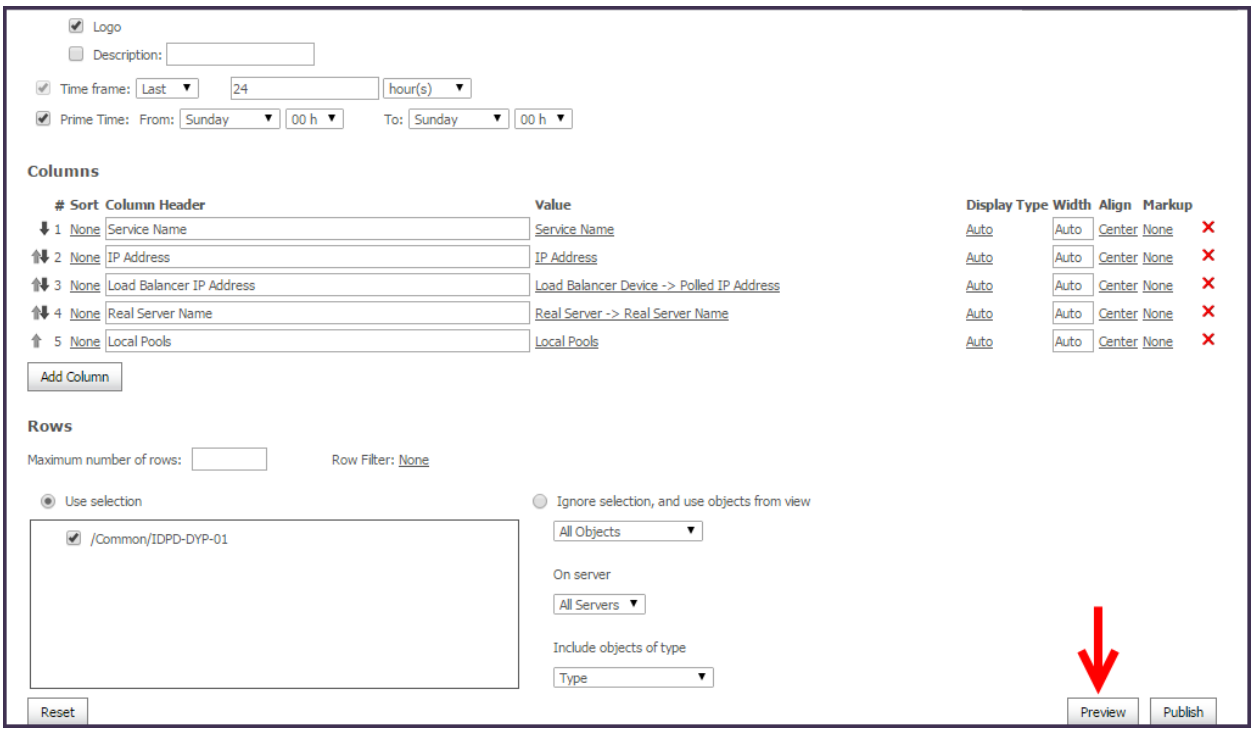
26. Click OK to save the attribute. It is now highlighted.



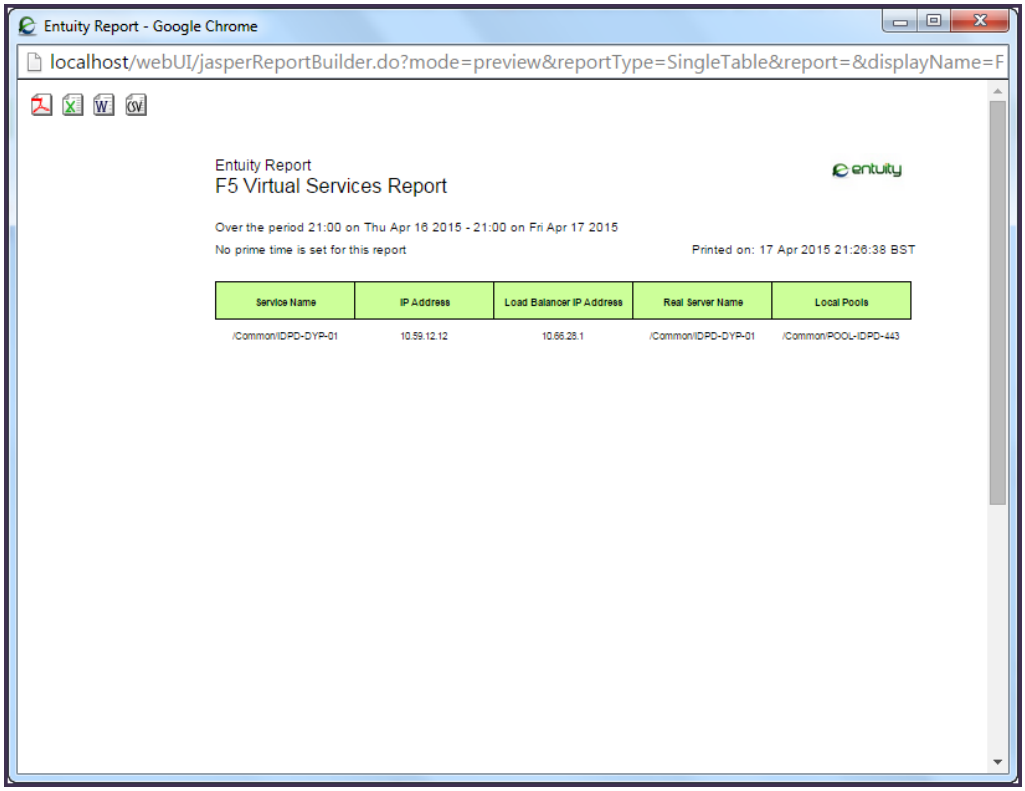
27. Click the OK button to place the attribute into the report. The Local Pools attribute is now in column 5 of the report.



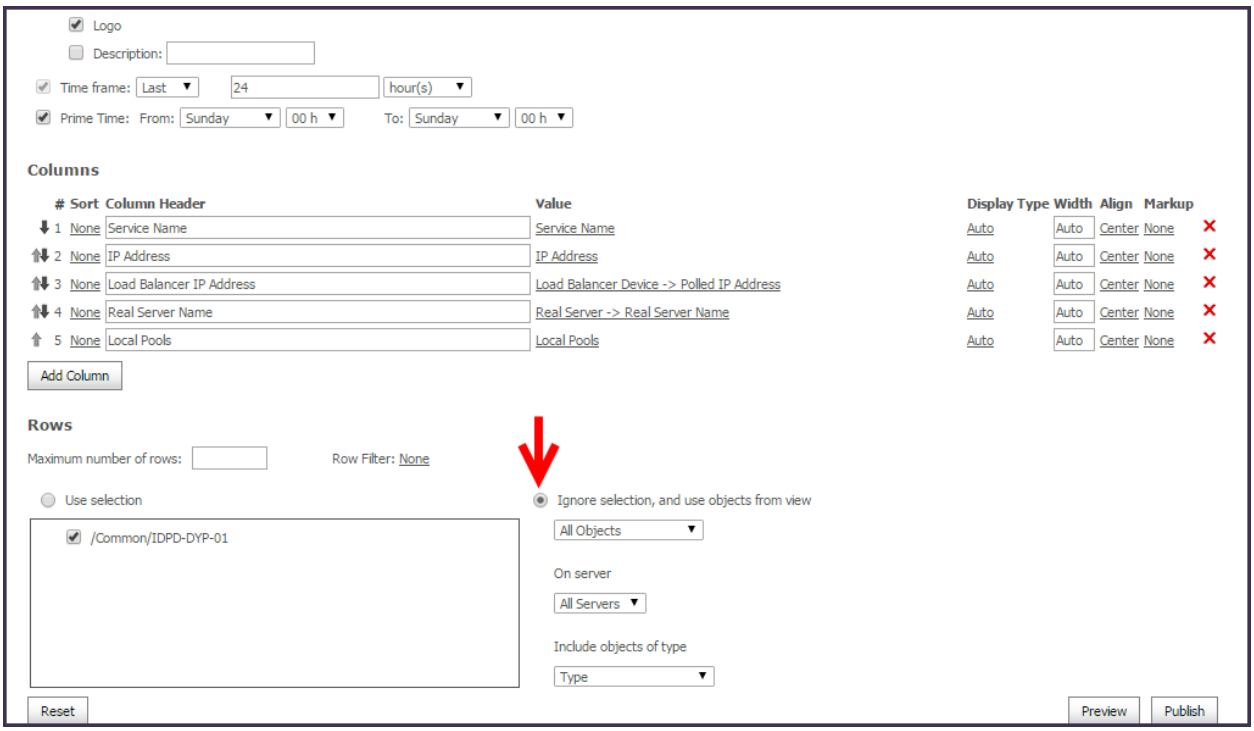
28. Scroll down to the bottom of the window. Click the Preview button to preview the report.



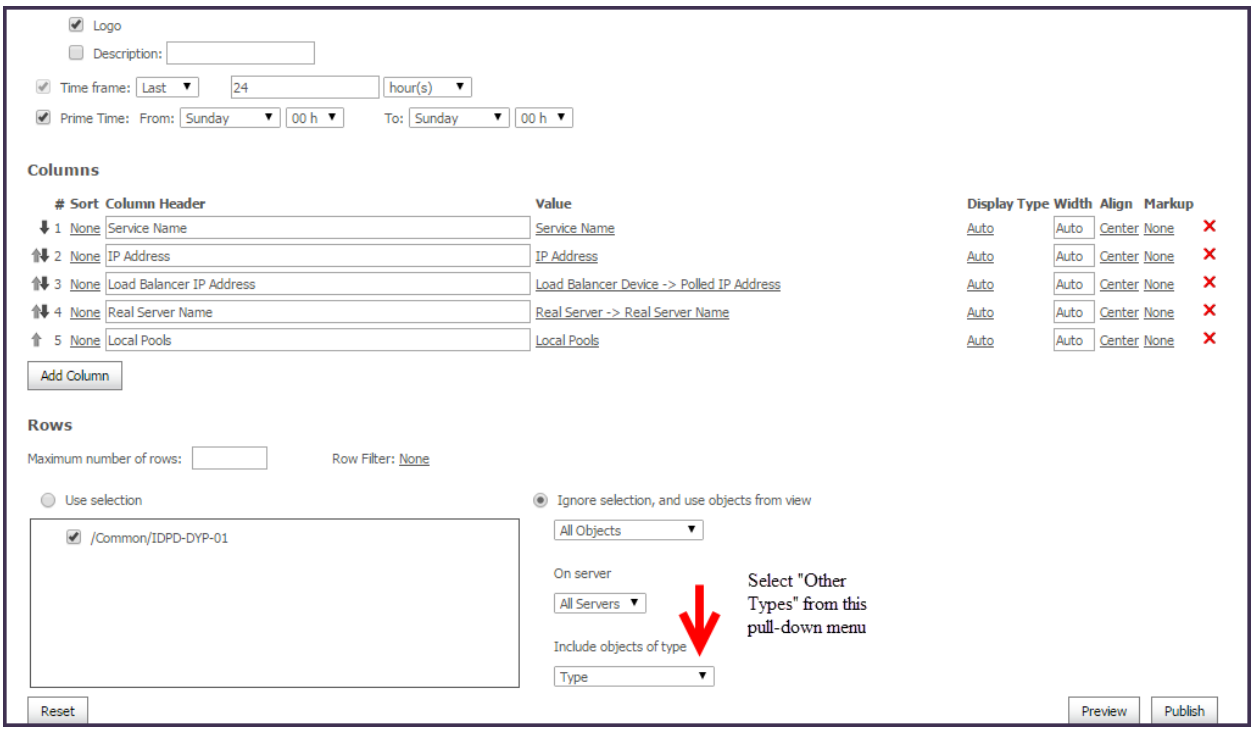
29. The report should contain information on a single virtual service. Dismiss the window if the output of the report is correct.



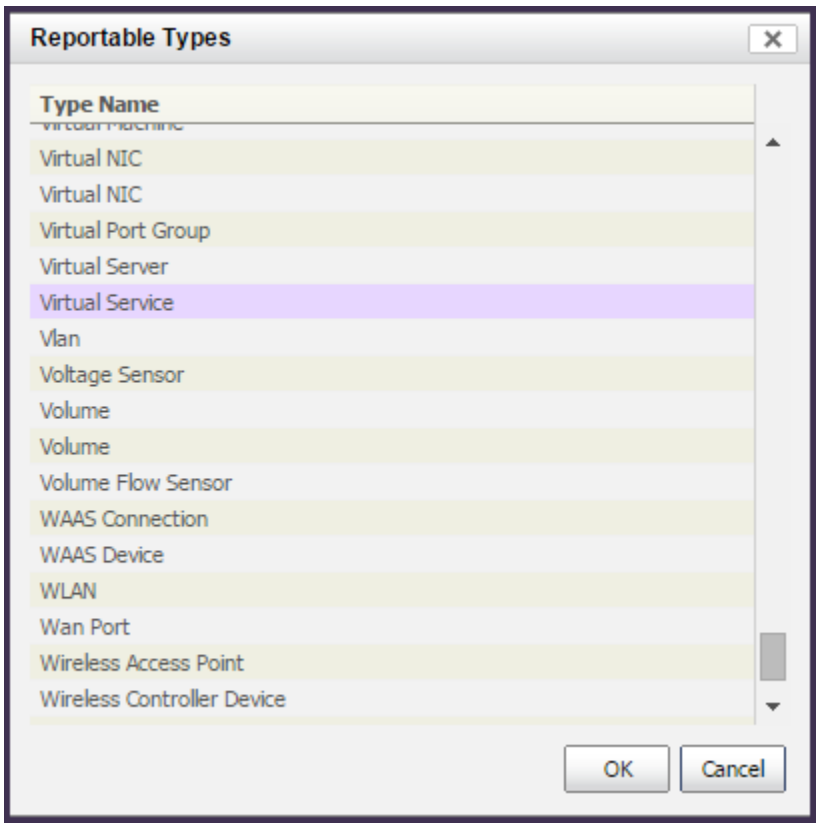
30. Click the radio button labeled “Ignore selection, and use objects from view”.



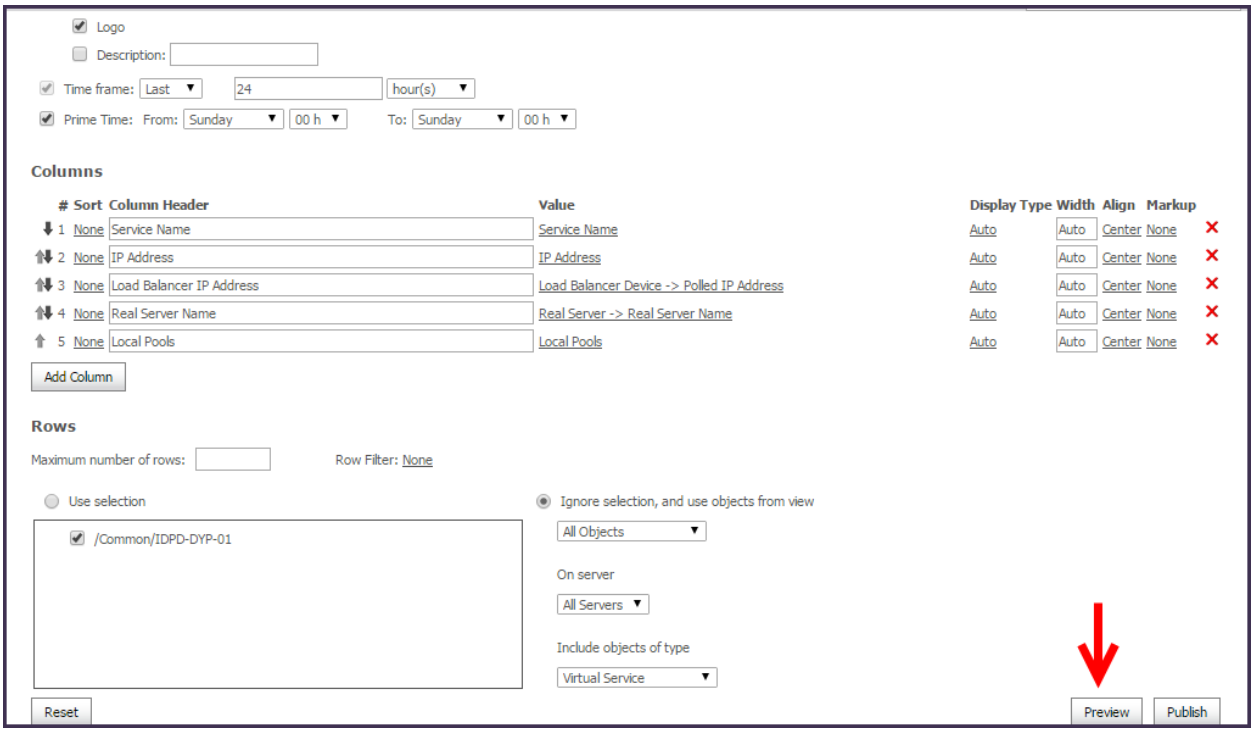
31. Next, select Other Types from the Include objects of type pull-down menu.



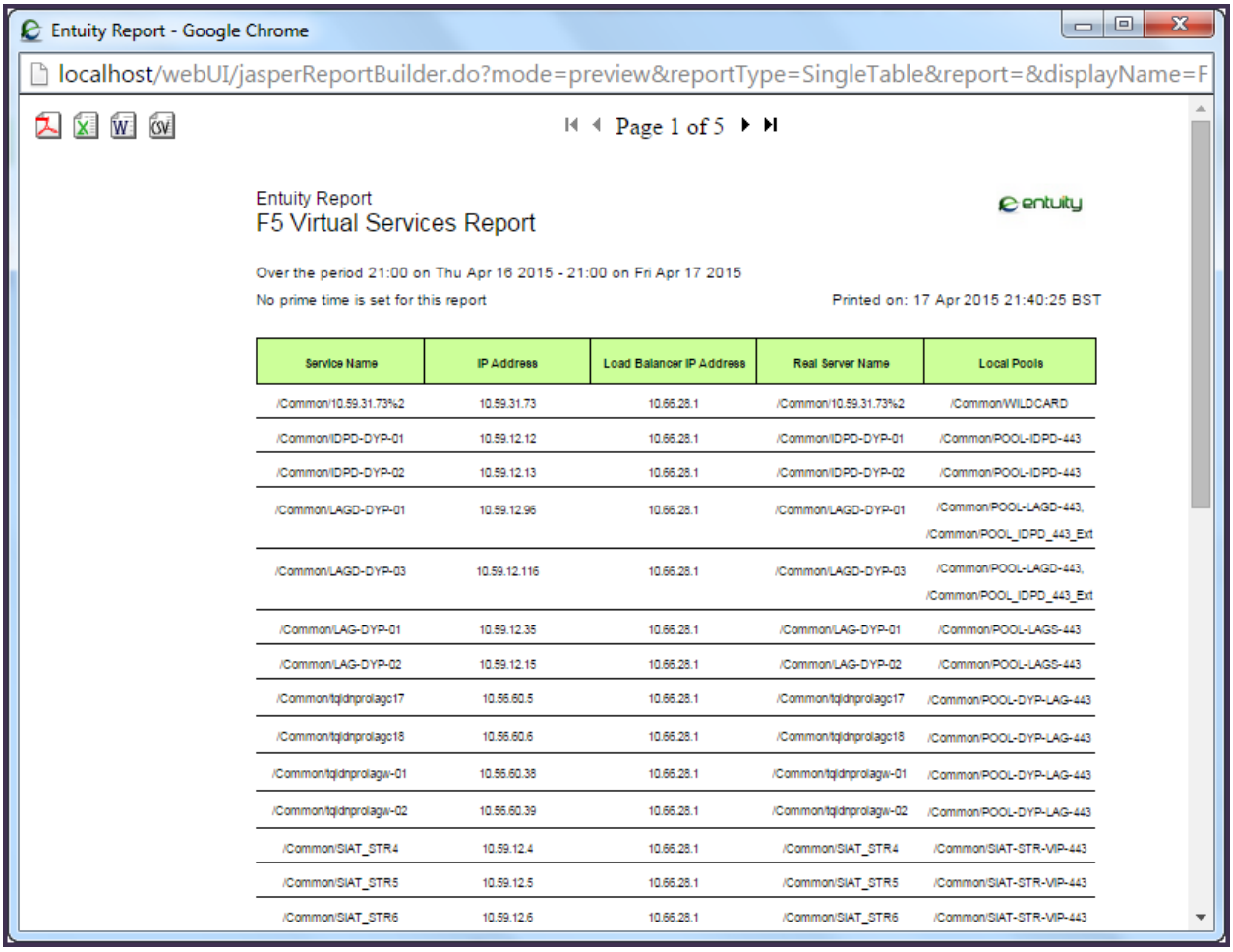
32. In the pop-up window, scroll down and select Virtual Service. Click OK to select this report filter.



33. Click the Preview button to preview the report.

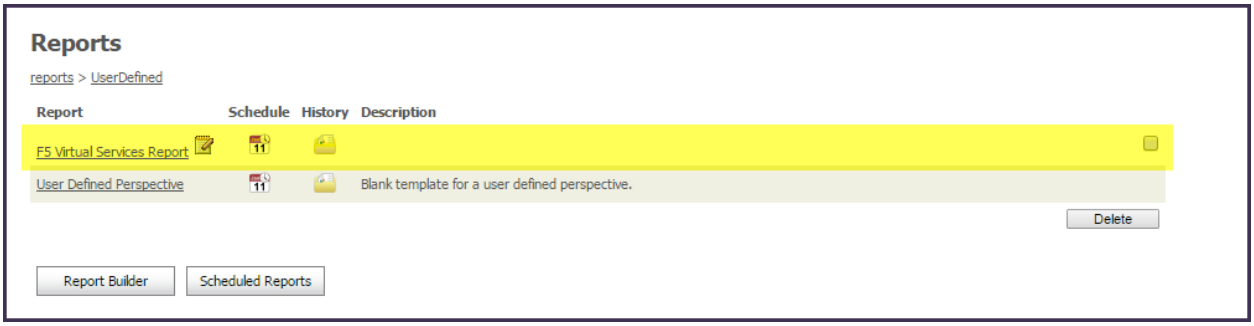
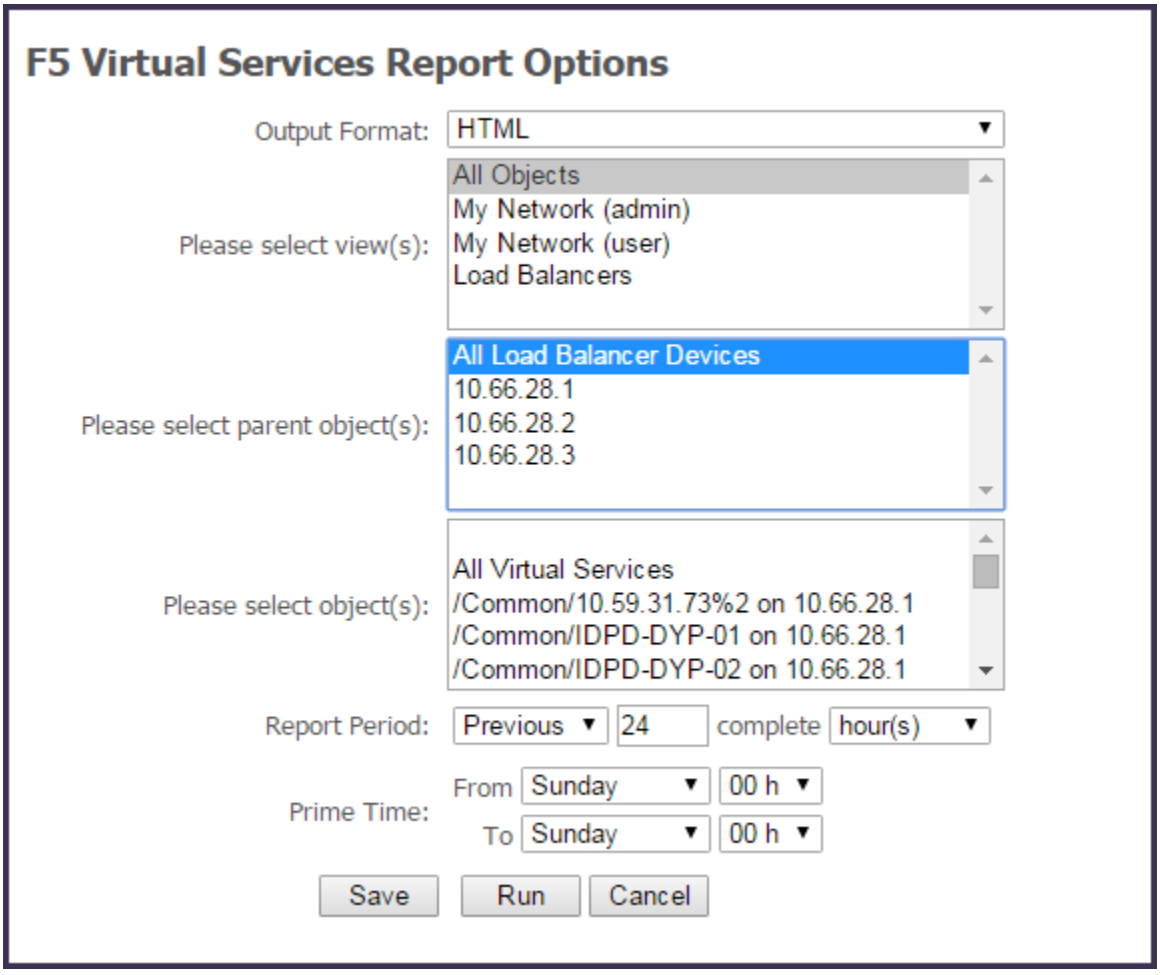


34. Depending on the view selected, the report should contain information on virtual services from all load balancers in the selected view. In this example, there are only 3 load balancers in the entire network. Since the My Network View was selected, all load balancers are reported on. Dismiss the window if the output of the report is correct.



Service Name	IP Address	Load Balancer IP Address	Real Server Name	Local Pools
/Common/10.59.31.73%2	10.59.31.73	10.66.28.1	/Common/10.59.31.73%2	/Common/WILDCARD
/Common/IDPD-DYP-01	10.59.12.12	10.66.28.1	/Common/IDPD-DYP-01	/Common/POOL-IDPD-443
/Common/IDPD-DYP-02	10.59.12.13	10.66.28.1	/Common/IDPD-DYP-02	/Common/POOL-IDPD-443
/Common/LAGD-DYP-01	10.59.12.96	10.66.28.1	/Common/LAGD-DYP-01	/Common/POOL-LAGD-443, /Common/POOL_IDPD_443_Ext
/Common/LAGD-DYP-03	10.59.12.116	10.66.28.1	/Common/LAGD-DYP-03	/Common/POOL-LAGD-443, /Common/POOL_IDPD_443_Ext
/Common/LAG-DYP-01	10.59.12.35	10.66.28.1	/Common/LAG-DYP-01	/Common/POOL-LAGS-443
/Common/LAG-DYP-02	10.59.12.15	10.66.28.1	/Common/LAG-DYP-02	/Common/POOL-LAGS-443
/Common/tqldnprolagc17	10.56.60.5	10.66.28.1	/Common/tqldnprolagc17	/Common/POOL-DYP-LAG-443
/Common/tqldnprolagc18	10.56.60.6	10.66.28.1	/Common/tqldnprolagc18	/Common/POOL-DYP-LAG-443
/Common/tqldnprolagw-01	10.56.60.38	10.66.28.1	/Common/tqldnprolagw-01	/Common/POOL-DYP-LAG-443
/Common/tqldnprolagw-02	10.56.60.39	10.66.28.1	/Common/tqldnprolagw-02	/Common/POOL-DYP-LAG-443
/Common/SIAT_STR4	10.59.12.4	10.66.28.1	/Common/SIAT_STR4	/Common/SIAT-STR-VIP-443
/Common/SIAT_STR5	10.59.12.5	10.66.28.1	/Common/SIAT_STR5	/Common/SIAT-STR-VIP-443
/Common/SIAT_STR6	10.59.12.6	10.66.28.1	/Common/SIAT_STR6	/Common/SIAT-STR-VIP-443

35. Click the Publish button to publish the report. The report will now be contained in the User Defined Reports folder.



36. Clicking the report hyperlink will bring up a report selector panel. The view may be selected. All or any of the load balancers can be selected and all or any of the virtual services can be selected. Standard shift and control-clicks can be used to select attributes to be reported on