Spectrum Protect
Custom Reporting

Click here to see the video: http://bit.ly/2E6gRdd
Introduction: Welcome everyone, my name is Joseph King, I’m the Chief Technology Officer at CAS Severn. Today's topic is Spectrum Protect custom reporting.

Let's take a look at where we started with custom reporting and Spectrum Protect, and where we’re at now. Let’s start with some history on Spectrum Protect reporting. It started with a legacy product called the Tivoli Storage Manager monitoring and reporting. I remember this product, it had cognitive built into it and a data warehouse, and it was a separate install from the main Tivoli Storage Manager Spectrum Protect installation.

Unfortunately, the Spectrum Protect monitoring reporting has gone into maintenance mode and the last 7.1 fix pack for this product was released in September 2015. The last fix pack for version 6.3 was released in the summer of 2016 and you can use it for a version 8 Spectrum Protect server. It's really just been tested in lab testing. We've done some testing at CAS Severn and we've seen that it generally works. But we really don't recommend moving forward with a product that isn't being actively maintained and upgraded.

The current guidance both from CAS Severn and IBM is to use operation center and custom reporting with an operation center that continues to evolve. And it's evolved as late as December 2017, and it's so new that we can't even include this capability in this video!

In 8.1.4 you can now create custom reports and operation center using a template-based overview report system, and this is for folks that have no SQL expertise. There's still the sequel-based reporting which is what we're going to be demonstrating today.

This template-based system is going to continue to evolve over time. Spectrum Protect custom reporting is straightforward; there's a little bit of time setting up the report administrator and the mail server.

We're going to talk about what can you see within custom reporting, and we're going to create a custom report to show you how that works.
02:24 The first thing you need to do is set up your report administrator in your mail server. Setting up your report administrators is as simple as registering a new user in the system so you can use the register admin command.

02:43 Then you need to set up your mail server. So important tips on the mail server, it needs to be set up to be an open relay to your Spectrum Protect server itself. A lot of times this takes a conversation with your email team to make sure that a server can connect to your mail server in order to send email. It doesn't take an SMTP username or password to log in, so it does have to be set up as an open relay to that particular server.

03:13 Once you've configured the report administrator and a mail server, then the default reports are configured until you do both of those steps. If you go to the reporting screen, nothing will show up so let's switch over to operations center and look at how do you do custom reporting.

03:31 If you're taking a look at the main screen for operation center, you just click on the report tab and you'll see a list of reports. The default reports that you're going to see once you set up your mail server in your reporting user are general operations and license and estimation.
03:57 So let's look at setting up your mail server. If we click on this mail server tab you'll see that you're going to set the administrative user, that's the user that you created in the previous step.

04:11 You're going to give it the mail server address name, you do have the ability to set the port, and as you can see again there's no opportunity to put in a user name or password to login to your mail server. So again, it does have to be set up as an open relay.
To create a custom report we're going to start with clicking on this plus tab, so this is how you add a new custom report, you can see that the settings are very straightforward.

First we have to give it a report name, and then when you want to send it (you can set up your report to send at a certain time of day). If we click on the date range we can say that it could be sent every day or weekly. Let's click on weekly and you can set what days of the week that you want it to send.

So say you had a summary report that's going to be sent to management, and maybe you only want to send that on Sunday evening. We can set that up to send at 9:30 p.m. on Sunday night. You have to give an email address or multiple email addresses to send it to. So put in a sample email address here, they can be a comma separated list, and then finally a list of server or servers that you want that run on. In our case we're just going to run that on our single server here.

Then you have a chance to add one or more queries to that test report, in this case the sample that we are going to use is from an IBM website.

Let's talk about some resources that you can look at, like sample reports, so you have some place to start from. So let's look at what we can see if you want to get a listing of the tables and columns that are available, for example the syscat.tables or the syscat.columns table, and they'll give you a full listing of everything that you are going to be able to see.
For example, we list two websites here that you can go to and see samples. One of them is just right from the Knowledge Center Spectrum Protect and the other one is from the developer works community for Spectrum Protect. if we take a look at the

If we look at the Knowledge Center we can bring that up. Very quickly and there's just a list of example reports, and we're going to use one of these for our testing. We're going to use this example for all active client sessions to determine how long they've been connected and their effective throughput in bytes throughout the section.

You can see here in the SQL statement that you can do some interesting things. You can cast your numeric values so they make sense. In this case we're looking at elapsed time, so we're doing a calculation here of elapsed time. We also can calculate here bytes per second, and both bytes sent per second and bytes received per second.
07:53 You can do most operations that you can do within an SQL statement. Let's just copy that and go back to Spectrum Protect operation center, and we can add that query to the SQL queries below. We just pasted that in, and hit save, and you'll get a succeeded notice. Here you can see that there's a checkbox for enable to pool.

08:19 When the enable checkbox is set, that report will run at the times and dates that you set it to. If you want that to turn into an ad hoc report, you simply can click on it and go up to enable or disable, and you can disable that. Once a report has been disabled, it could still be run in an ad hoc fashion. So, if we right-click it hit on send, we can set up a list of usernames that we want that report to be sent to, and we can see that it succeeded.

08:50 We'll close that and take a look at what comes over in an email. If you take a look at the contents of that, then are just sent to you an email so you can see the session the client - the elapsed time the bytes sent the bytes received.
09:09 A good way of testing reports before you commit to them is views of the command builder. So, we can open command builder and enter the query that we're testing. You get the results exactly like you would in that report. This way you can edit and alter your SQL statement to get it how you want it to be before you have to send it to your email for testing.

09:34 Start with the examples that are on the IBM Knowledge Center, and alter them. This is a good way of being able to take a look at the different cast statements that you can use in order to do calculations to convert seconds into minutes and really get their report how you want it to be.

09:59 Please note when you're creating a report, the content will not come over as a CSV file. If you need the content to be in a CSV file just run it from the command line with the comma delimited flag. You'll get a nice output file in common delimited format that you can use to import into Excel or any other tool.

10:19 As we wrap up custom reporting, it is straightforward as you can tell. Start with those examples from the Knowledge Center. It's going to continue to evolve using the template-based system that's going to begin in 8.1.4. If you do not want to use the operation center reporting, there's many great third-party products out there.

10:46 Feel free to email us at CAS Severn and we can help you with some decisions when it comes to some of those third-party products.

10:51 I'm Joseph King, this was spectrum protect custom reporting. Feel free to reach out to us if you need any further information.

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