Explore Digital Transformation at BMC Day Chicago

Join us on Thursday, March 2nd 2017

Get the tools, training, and technology you need to drive digital transformation in IT and business. BMC Day 2017 in Chicago offers you a full agenda of IT management topics, networking, and exposure to BMC products and solutions. Participate in discussions on strategies, best practices, and technologies with BMC experts, industry thought leaders, and your peers.

This event will enrich your professional development in three ways:

Learn: Discover new strategies and solutions for top IT challenges in your organization.

Connect: Interact onsite and online to expand your professional network and social contacts.

Advance: Deepen your understanding of trends and technologies that are fueling digital transformation.

Mark your calendars for BMC Day in Chicago, part of our global IT management event series.

Track 3 – Performance, Capacity & Analytics

2:20 – 2:45 Customer Case Study, Actionable Intelligence using filter based reporting

Ben Davies, Senior IT Metrics and Reporting Analyst at a very large insurance company, who is now a Senior Consultant at Moviri will review how to get Actionable Intelligence using the tools and techniques of filter based reporting in BCO. These techniques are independent of how the workspace is organized. These tools and techniques are valid as soon as the first ETLs are implemented.

As a Moviri consultant, Ben Davies applied these tools and techniques, delivered Actionable Intelligence within 10 minutes of starting the reports. This is a powerful tool that is relatively easily deployed but takes some practice to use well.

===

Session 2B: Insurance Customer Case Study, Actionable Intelligence using Filter Based Reporting; Speaker: Ben Davies, Senior IT Metrics and Reporting Analyst at a very large insurance company, who is now a Senior Consultant at Moviri.

Ben Davies will review how to get Actionable Intelligence using the tools and techniques of filter based reporting in BCO. These techniques are independent of how the workspace is organized. These tools and techniques are valid as soon as the first ETLs are implemented.

As a Moviri consultant, Ben Davies applied these tools and techniques, delivered Actionable Intelligence within 10 minutes of starting the reports. This is a powerful tool that is relatively easily deployed but takes some practice to use well.
Good Morning, Welcome to BMC Day in Chicago. This is the Filter Based Reporting with TrueSight Capacity Optimization session. Part of the Moviri Actionable Intelligence Series.

We make use of the notes section, so download the presentation and see what sort of Scooby Snacks are in the presentation.

There is a test later. The answer is “Filter Based Reporting”. Let's say it together..... Filter Based Reporting.

======
This is part of the Moviri Actionable Intelligence Series of presentations.

Presentation developed January 2017, it applies to BMC Capacity Optimization product 9.x and 10.x

The tools and techniques presented here are highly customizable for particular purposes. While examples are presented here, this is not the only way to apply the tools and techniques.
Today we will do a quick introduction, present our problem statement, expand on the current state, then propose a solution. Finally we will open up for questions but feel free to ask clarifying questions as we go.

The intent here today is for you to get an idea of **how you can use these tools and techniques to deliver actionable intelligence to your environment.**

The tools and techniques presented here are highly customizable. While examples are presented here, this is not the only way to apply the tools and techniques.

====
My Name is Ben Davies and I did capacity planning for four years using a seriously cool Excel spreadsheet, then was a power user (for 3 years) of TSCO with a large insurance carrier here in Chicago. While there, I created these tools and techniques to improve my ability to report on items of interest in real time, like on phone conversations, or during active investigation and analysis efforts.

The company outsourced much of IT, including capacity, and I was fortunate enough to become one of the cool kids at Moviri.

This matters because if I gave this presentation a year ago, and you wanted to explore it more, the best I could do is give this presentation.

But now. Now with Moviri, I can spend as much time as you wish to explore how you can use this technique and even help you set it up and make it work for your team. If you wish to explore this option, call us, we can be cool together.
The situation with TSCO reporting is that there are two basic reporting options. Quick Analysis and Works Reporting.
The “problem” is that these two reporting tools and techniques have benefits and limitations.

**Quick analysis is by definition quick**, in that any metrics can be compared to any other metric very quickly, but not formatted quickly.

Works Reporting can be formatted to present information ‘just so’ but **cannot quickly change metrics**.

Let’s explore these in more detail.
Quick Analysis

- Metrics can be added or removed easily from the chart.
- Takes time to select each metric if metrics are across several systems.

Quick Analysis easily places any metrics on one chart. Objects are chosen easily and removed from the chart easily.

This is a great technique and you should be using it often.

But ... this does not remember your ‘favorite’ report methods, tools, and techniques. And it takes some time when there are several objects to report on.
Works Reporting remembers your ‘favorite’ report methods, tools, and techniques. You can save different versions for specific types of analysis, and can copy from one ‘bucket’ to another.

I have made hundreds of these, use them freely and often.

but does not lend itself to changing the objects in the charts, as they are anchored to the ‘buckets’
So what is an analyst to do??

This is the dilemma I faced. What is an analyst to do when I know my favorite chart layouts to quickly identify the actionable intelligence, but can not easily define my data, or can easily identify my objects (quick analysis) but then have to modify the chart significantly.

What I need is a mix of Quick Analysis and Works Reporting. Is there even such a thing?
**Is There An Alternative?**

**The Best of Both?**

- **Quick Analysis**
  - Quick to make
  - Not easy to change reports

- **Works Reports**
  - Can have many different types of custom reports
  - Super Easy to change?
  - Can have many different types of custom reports
  - Not easy to change objects

---

**IS there an alternative?**

Is there an alternative that allows for reports to be setup ‘ahead of time’ like in the Works Reporting solution, and the objects to be reported on, supplied ‘just in time’ like in the Quick Analysis idea.

To be clear this third option would NOT replace the other two methods, but rather, to supplement them.

**So what do you think? Is there a solution??** We should put on our thinking caps, or in my case my **Suck Less** hat on and work on a solution.
Well Let's put on our thinking cap – or Suck Less Hat
Filter Based Reporting

Filter based reporting looks like this:
Several reports are staged for particular investigative topics. A device based study, storage study or storage in violation of thresholds.

Each study type has its own filter.

Objects are selected just in time, placed in the filters and the reports run.
Filters can be searches.

Remember before that you would be asked a question. What was the answer???

So if you said that "Filter Based Reporting" then you would be right.

What is “Filter Based Reporting”???

Filter Based Reporting is reporting where the chart contents and formatting have been developed with a particular objective in mind, then the objects contained in the report is chosen at report time by being defined in a filter.

This allows for the best of both worlds. The charts are formatted as desired to make quick actionable intelligence determinations AND the objects are chosen just in time.

Filter based reporting looks like this: Several reports are staged for particular investigative topics. Such as a device based study, or storage study or storage in violation of thresholds study.

Each study type has its own filter.

Objects are selected just in time, placed in the filters and the reports run. The filter can be based on searches, even complex searches.

In this example there are only a few charts but there is no limit. One filter drives a whole series of charts.

So lets look in detail how this works.

Device study, the first section, has a couple of charts. Those charts are driven by the filter DeviceStudyFilter. So set the filter, then run the charts.

Storage study, the next section, has a chart. That chart is driven by the StorageStudyFilter. Again set the filter, then run the chart.

The last two sections each report has its own filter. They just got mixed up alphabetically. Anyway same idea, set the filter, run the chart.

https://docs.bmc.com/docs/display/btco105/Entity+filters
https://docs.bmc.com/docs/display/btco107/Managing+entity+filters
We setup an **Analysis and Reports Section** and dedicate a ‘space’ to each person / mission / use case.

We setup one for the “Capacity Group”, “Architecture Group”, “Command Center”, “Network Security Group”, “Database Group”, and others as they decided to use this technique.

(The filters place at the bottom of the list supplies filters potentially to all of the sections, but most groups made their own filter groups.)

This is an excellent way for non capacity users to gain value from TSCO. **These users can make their own actionable intelligence. On their own. Without your help.**

**In the next slide we will look in the Command Center Report bucket 1. Then the Capacity Ad Hock Request bucket 2**
The Command Center / Help Desk for example, has a series of reports predefined. All of these reports are driven from the ONE filter `CommandCenterEntityFilter`. You can see which filter is driving the report in the top right section, next to Entity filters.

When a system or set of systems comes up in the context of a call or investigation, those systems become the filter, and the appropriate reports are run. So when you are investigating storage set the filter and run the storage reports. When investigating the database, set the filter and run the database reports.

As this technique is used additional charts are created. Eventually you end up with a significant collection.

Some for very specific purposes.

This technique is fast. **A quick filter and a few reports can draw attention to a particular device or allow the focus to move to other devices, which then changes the devices in the filter, and the reports re run.** This can be done very quickly.
This use case is that of the capacity team, which is involved in a whole host of investigations and conversations, so they have a bunch of reports grouped together for particular mission or study group.

To study AIX devices for example, place the search string in the AIXFilter, then run the AIX reports. Maybe there is a generic search of tag:AIX that may be modified to narrow the pool. Anyway, the collection of reports are easily run and are formatted to show actionable intelligence. The most useful reports can be shared with other studies by copying, then changing the filter that the new report is looking to.

On the next slide we go to Alerted Storage.

====
There is some nuance to this technique and you will have to ‘play with it’ to make it work for you.
This use case is about alerted storage. First make a “Resource Monitor” rule (right side, and next page) with the intent to use it within the alerted storage report group (left side).

This rule says “Look in AIX, Standalone Server, and VMWare domains and devices marked that violate the resource monitor rule “Storage Alert”
If you have not seen a monitor rule, here is an example.

The storage alert said alerts on any mount point that is over 96% used.
This use case is on alerted Windows storage. Here we combine an OS based filter with a resource monitor rule to flag devices.

You can make a report that shows all Windows devices that have triggered the storage rule. And a separate report that shows all VMWare devices that have triggered the rule.

These reports can be run directly by the technology owners to monitor their environment. Our reports give a historical chart with the lasts 180 days of history, so that the mid term history can be evaluated. A stable 98% may be less concerning than a volatile 85% device. The reports give enough information to easily show actionable intelligence.
So what do these search strings look like in filters?? Here are a few examples.

Note that
Any search string can be used in a filter,
And you can test the search string in the TSCO console
And combine with tags (if you use tags)
And combine with ( AND OR + - ) *

(type:sys –type:object)

(+tag:AIX AND sys:p* NOT sys:*@*) –type:object

(((sys:*app01 OR sys:*app02) AND tag:Unix) –type:object)

So what do these search strings look like in filters?? Here are a few examples.

Note that
Any search string can be used in a filter,
And you can test the search string in the TSCO console
And combine with tags (if you use tags)
And combine with  AND OR + - ( brackets ) *

The middle filter says  Include everything tagged AIX, and starts with a p, which is probably production; but NOT systems that have an @ in the name. Also excluded anything that is a type ‘object’, which are reports

====
Further information

https://docs.bmc.com/docs/display/btco107/Search+string+syntax

https://docs.bmc.com/docs/display/btco107/Managing+entity+filters

https://docs.bmc.com/docs/display/btco107/Adding+tagging+rules
There is a lot of help with the individual components.

The support site, Everyone should be using the support site.

a YouTube channel, Who knew BMC had a YouTube channel?? There is a sub channel for capacity

the Communities, The communities is a good place to get questions answered. Many users have said how they solved problems even if it were not the official BMC suggestion. This is a place that gets better the more people that use and contribute to it.

the 4 thousand page user document. I refer to this document a lot, especially as I try new things. So I would go to a talk like this, then use the document to clarify what things are and how they basically work. There are 6 pages of search syntax

However, putting this all together can be bit confusing. So give us a call and we can help stich together a solution with you.

Using these tools and techniques, It won’t take long for YOU to be finding ACTIONABLE INTELIGENCE with your data.

======
https://www.youtube.com/user/BMCdocs/search?query=capacity
https://communities.bmc.com/community/bmcdn/capacity_management
https://docs.bmc.com/docs/display/btco107/Home
And that is the presentation...

We hope this helps YOU deliver actionable intelligence

Questions??
Keywords and Concepts

Quick Analysis
Works Reports
Filter based reports
  Search strings
  Update filters –
    filters drive reports, drive filters
  Resource Monitor rules

Separate report section
  Sub sections for groups / mission
  Copy reports

Deliver Actionable Intelligence