**What's new in Dynamics 365 Business Central telemetry - May 2023**

It is May and it has been a month since the last newsletter. The last month has been busy with lots of telemetry sessions and discussions at Directions North America and Directions Asia. A lot of the feedback from these interactions has already been transformed into new content in docs and in the Power BI apps.

As always, the bleeding edge news on Dynamics 365 Business Central telemetry happens on Twitter, so if you want to keep up with the latest and greatest (and the beta versions of the Power BI telemetry apps) then follow me there (@kennienp). The intention of these monthly newsletters is to try to gather everything that I know and learn about this area and present it here. Let’s go…

In the May 2023 edition, read about these things:

* Upcoming conference sessions
* Power BI Usage apps – May updates
* New signal/updates
* Documentation improvements
* Tips and Tricks

# Upcoming conference sessions in May 2023

**Business Central Launch event (March 29 – end of June 2023)**

The Business Central Launch Event will take place from March 29-31, 2023. During the three days, you’ll be able to participate in a live opening session, watch sessions on what's new in 2023 release wave 1 and participate in Q&As. After March 31, all sessions will be available on-demand until end of June 2023.

Event is online, agenda is published online, registration needed, attendance is free).

I have recorded two sessions for the event:

Get data-driven with telemetry. This is a non-technical session on how implementation project managers can use telemetry to get low-friction go-lives. The session also has a section for ISV product owners/managers on how they can use telemetry to improve the quality of their apps.

<insert screenshot>

What’s new in telemetry. A technical session on new data in telemetry and tips and tricks for the KQL data nerds.

<insert screenshot>

Read more and register at

https://aka.ms/bcle

**Days Of Knowledge Central (May 25 - 26, 2023) in Dusseldorf, Germany**

If you attend the Days Of Knowledge Central conference this year, consider learning some tips and tricks about telemetry in these sessions:

Telemetry From Basics To Advanced Usage, by Microsoft MVP Krzysztof Bialowas

<https://directions4partners.com/days-of-knowledge/central-2023/schedule/?tid=430482>

Telemetry For Consultants, by Microsoft MVP Krzysztof Bialowas

<https://directions4partners.com/days-of-knowledge/central-2023/schedule/?tid=472054>

Read more

<https://directions4partners.com/days-of-knowledge/central-2023/>

**Days Of Knowledge Nordic 2023 (June 1 - 2, 2023) in Odense, Denmark**

If you attend the Days Of Knowledge Nordic conference this year, consider learning some tips and tricks about telemetry in these sessions:

Full day pre-conference session: Telemetry Deep-Five, by Microsoft MVP Krzysztof Bialowas

<https://directions4partners.com/days-of-knowledge/nordic-2023/schedule/?tid=477469>

Telemetry From Basics To Advanced Usage, by Microsoft MVP Krzysztof Bialowas

<https://directions4partners.com/days-of-knowledge/nordic-2023/schedule/?tid=415395>

Read more

<https://directions4partners.com/days-of-knowledge/nordic-2023/>

**Conferences in June 2023**

There will also be telemetry sessions at the conferences mentioned below. In upcoming newsletters, I will go more into details about the sessions there.

BC/NAV Techdays 2023 (June 22-23, 2023) in Antwerp, Belgium

<https://www.bctechdays.com/>

# Power BI Usage apps – May updates

The May updates for both apps mainly include changes of type “all the little things” (to make the reports easier to use). “But what about all the new cool types of telemetry we got in the 22.0 release?” Hold your horses, most of that will come in the June 2023 updates.

**Environment Usage app**

Error report

On page 'Incoming Webservice Errors', added per-app/per-object visuals. Allows you to easier troubleshoot errors based on app or object.

On page 'Connector Errors', added per-app/per-object visuals. Allows you to easier troubleshoot errors based on app or object.

On page 'Report Errors', add per-app/per-object visuals. Allows you to easier troubleshoot errors based on app or object.

On 'Database deadlocks' page, add top/bottom stacktrace visuals. Allows you to identify where the deadlock surface the user and where it originates from.

Performance report

On page app updates, changed visuals to use a matrix. Makes it easier to drill into app updates data.

On page 'Reports', added visual to show time to generate dataset and render the report. Allows you to troubleshoot report performance issues due to dataset generation or time spent in applying layouts.

Administration report

On page 'Company changes', added user id. Allows you to see who did the change.

See the full change log here:

<https://github.com/microsoft/BCTech/blob/master/samples/AppInsights/PowerBI/Reports/AppSource/environment-app-pbix/changelog.txt>

**App Usage app**

Usage report

Performance report

Error report

Dataset

See the full change log here:

https://github.com/microsoft/BCTech/blob/master/samples/AppInsights/PowerBI/Reports/AppSource/isv-app-pbix/changelog-isv-app.txt

# New signal/updates

**New dimension coming in 21.6/22.1: exclusiveTime in long running AL methods signal (event RT0018).**

Partners gave us feedback that event RT0018 does not provide value since it included time spent in modal events. Therefore, we added the time where the measurement was suspended so that partner telemetry users can filter the modal ones away.

KQL sample has been updated, see <https://github.com/microsoft/BCTech/blob/master/samples/AppInsights/KQL/Queries/ExampleQueriesForEachArea/LongRunningAL.kql>

**Smaller improvements in 22.x**

When finalizing the 2023 release wave 1, we did some smaller improvements that will come in version 22.0 or in a minor update to version 22:

* Error codes in failed OData calls (event RT0008) to help troubleshoot 400 return code signal.
* Long running AL method telemetry (eventId RT0018) will include details on SQL operations in the custom dimensions sqlRowsRead and sqlStatements.
* Outgoing web service telemetry (eventId RT0019) will include details on client type and AL stack trace in the custom dimensions clientType and alStackTrace.

KQL samples might already have been updated, see [BCTech/samples/AppInsights/KQL/Queries/ExampleQueriesForEachArea at master · microsoft/BCTech (github.com)](https://github.com/microsoft/BCTech/tree/master/samples/AppInsights/KQL/Queries/ExampleQueriesForEachArea)

The Power BI apps will be updated to use this information in the May/June 2023 updates.

**Coming soon/in the works (no ETA given)**

* Information on files blocked from upload due to malware scanning (only in the online version).
* PTE validation signal (PTEs that block updates to next major)

# Documentation improvements

**No-code alerting with Power BI Metrics**

If you use the Power BI app on telemetry data, it's very easy to track the metrics that are important to you. With metrics in Power BI, you can curate your own metrics and track them against key business objectives, in a single pane. This feature enhances data culture by promoting accountability, alignment, and visibility for teams and initiatives within organizations.

For my Directions 2023 keynote this year, I made this project manager scorecard in less than 30 minutes:

<insert screenshot>

Read more here: <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/administration/telemetry-alert#no-code-alerting-with-power-bi-metrics>

**New docs page: Telemetry FAQ**

We added a new docs page: Telemetry FAQ. Any questions we should add here?

<insert screenshot>

Read more here:

<https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/administration/telemetry-faq>

**Install, share, and update the apps**

Confused about how to update the Power BI apps and also how the semantics of overwrite behaviour is?

Read more here:

TODO: add BC docs link instead of PBI link

<https://learn.microsoft.com/en-us/power-bi/connect-data/service-template-apps-install-distribute>

**KQL samples added to docs**

We added KQL samples to the docs pages on Job Queue telemetry

<https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/administration/telemetry-job-queue-lifecycle-trace>

and on Database Lock Timeout telemetry

<https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/administration/telemetry-database-locks-trace>

This is the beginning of moving more content from BCTech into docs. Stay tuned for more of this coming to docs.

# Tips and Tricks

**Calculating report rendering time**

The time spent to run a report consists of two parts: generating the dataset and rendering the report. In report telemetry, you get two durations: serverExecutionTime and totalTime. The former is roughly the time it takes for the NST to generate the dataset. In case you want to troubleshoot report performance, you can calculate the rendering time like this in KQL:

renderingTimeinMS = totalTimeInMS - serverExecutionTimeInMS

The KQL sample

<https://github.com/microsoft/BCTech/blob/master/samples/AppInsights/KQL/Queries/ExampleQueriesForEachArea/Reports.kql>

has been updated with this info.

# Blog posts and videos

TODO

Did you know that the BCTech repo has pages with links to blog posts and videos on telemetry?

Blogs: https://github.com/microsoft/BCTech/blob/master/samples/AppInsights/BLOGS.md

Videos: https://github.com/microsoft/BCTech/blob/master/samples/AppInsights/VIDEOS.md

If you create blog posts/videos on telemetry (or know of things that are not linked from these two pages), feel free to do a pull request to the repository (or send me an email/message)

**That’s all folks!**

That's it for the April newsletter. If you made it all the way down here, then you are truly a Telemetry Hero. See you in a month.

PS. Would love to hear your experiences on using alerts to be more proactive. Reach out (or blog about your experiences.)

PPS. It is not too late to rate the Power BI apps on Appsource 😊 Your feedback matters (a lot).

Do it here:

<https://appsource.microsoft.com/en-us/product/power-bi/microsoftdynsmb.bc_telemetry_pbi_app>

(for environment telemetry)

or

<https://appsource.microsoft.com/en-us/product/power-bi/microsoftdynsmb.bc_telemetry_pbi_app_isv_version>

(for app telemetry)