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

It is (almost) November and it has been a month since the last newsletter. In the last month, life has (still) been busy preparing for Summit NA 2023 Directions EMEA 2023 (and also attending the former). But we still managed to get some improvements in for the telemetry feature, both new signal, docs, and functionality in the Power BI apps.

As always, the bleeding edge news on Dynamics 365 Business Central telemetry happens on Twitter/X (not sure about the future of this platform, but will stay there for a bit), 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 November 2023 edition, read about these things:

* Business Central launch event
* Upcoming conference sessions (Directions EMEA 2023)
* Power BI Usage apps – November updates
* New signal/updates
* Documentation updates
* New blogs and videos

# Business Central launch event

Join the Business Central Launch Event (BCLE) to see what’s new in Dynamics 365 Business Central 2023 release wave 2. BCLE (see, we do abbreviate everything at MS…) is a free virtual event for everyone from reselling partners to consultants, and ISV partners. I am hosting the session *What’s new in telemetry*

<insert picture>

Join me and thousands of other Business Central fan-people!

Register today: <https://aka.ms/BCLE>

# Upcoming conference sessions in November 2023

**Directions EMEA 2023 (November 1-3, 2023)**

If you attend the Directions EMEA 2023 conference this year, consider learning some tips and tricks about telemetry in five very different sessions there:

On 2023-10-31 (From: 18:00 to 20:00), Microsoft hosts a fun workshop *Join the Kusto Detective Agency*. Bring a laptop to the expo reception and solve detective stories with KQL:

<https://directions4partners.com/events/directions-emea-2023/session-schedule/?tid=561291>

On 2023-11-01 (From: 12:15 to 13:00), I run a roundtable discussion *Microsoft roundtable: data-driven implementations* on how partners can use telemetry pro-actively in their project implementation lifecycle - from prospect meetings, during implementation, and before/after go-live:

<https://directions4partners.com/events/directions-emea-2023/session-schedule/?tid=555803>

On 2023-11-02 (From: 16:15 to 18:00), Microsoft MVP Eric "waldo" Wauters have an extended session titled *How To Use Telemetry To Improve Your Product.* This session is covering developer and ISV angles of telemetry.

<https://directions4partners.com/events/directions-emea-2023/session-schedule/?tid=500738>

On 2023-11-03 (From: 11:30 to 12:15), I will present the session *Microsoft presents: what's new in telemetry.* This session is covering new features (big and small) around telemetry since May 2023.

<https://directions4partners.com/events/directions-emea-2023/session-schedule/?tid=550672>

On 2023-11-03 (From: 12:45 to 13:30) Microsoft MCT and Author Duilio Tacconi & Microsoft MVP Stefano Demiliani presents their session *Telemetries. Real life tips from the field.* This session is covering the use of telemetry to troubleshoot real customer issues.

<https://directions4partners.com/events/directions-emea-2023/session-schedule/?tid=515977>

Read more about Directions EMEA 2023 here:

<https://directions4partners.com/events/directions-emea-2023/>

# Power BI Usage apps – November updates

The November updates for both apps mainly focus on adding pages and visuals for new signal and do some small bugfixes (only listed in the release notes) and enhanced filtering.

## For both apps

**Usage report**

New page 'Queries'. Shows all usage of data analysis on queries.

## Environment Usage app (for VARs)

**Usage report**

On page ‘Reports’, it is now possible to filter on usage of the Financial reporting (aka account schedules) feature.

**Error report**

New page 'Environment extension validation diagnostics'. Shows all diagnostics for extensions that needs to be fixed before upgrading to the next version of Business Central.

On all pages, added links to documentation and troubleshooting guide.

On page Report Errors, added new visual on what the user did. Also fixed bug where report errors only showed cancelled reports, not exceptions.

On page outgoing web service errors, added HTTP details to HTTP status visual. Also added new HTTP filter possibilities.

**Administration report**

New page 'Change log lifecycle'. Shows all lifecycle events (add/remove/change) for fields in the changelog feature.

New page ‘Environment extension validations’. Shows validations of environments to see if their extensions are compatible with the next version of Business Central.

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

## App Usage app (for ISVs)

**Usage report**

On most pages, added visual that shows usage over Last 7 Days, Last 30 Days, From 31 Days - 60 Days ago, From 61 Days - 91 Days ago. Use this to analyze growth and churn on your app pages, reports, features, and integrations.

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

# New signal/updates

**Configuration of changelog (23.0)**

The Business Central change log feature lets you track direct modifications a user makes to data in the database. You specify each table and field that you want the system to log, and then you activate the change log. The change log is based on changes that are made to data in the tables that you track. Telemetry is now logged for the following changes to the configuration of the change log:

When a field is added to be tracked in the changelog.

When changelog configuration for a field is changed.

When a field is removed for being tracked in the changelog.

Read more in the documentation here (might not be live at the time of the publishing of the newsletter): <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/administration/telemetry-changelog-configuration-trace>

KQL samples are both added as part of the documentation article above and also available on BCTech here: <https://github.com/microsoft/BCTech/blob/master/samples/AppInsights/KQL/Queries/ExampleQueriesForEachArea/ChangeLogLifecycle.kql>

If you want to alert on this signal, the alerting scenarios on BCTech has also been updated with information about change log configuration changes:

<https://github.com/microsoft/BCTech/tree/master/samples/AppInsights/Alerts#:~:text=Change%20log%20configuration%20changes>

**Pageviews on queries (23.0)**

The new capability for analyzing data from query objects using a *Analyze* toggle is also reflected in telemetry. Data is available in the normal page view telemetry (event id CL0001), you just need to filter on.

customDimensions.pageDataSourceType == 'Query'

Read more in the documentation here (might not be live at the time of the publishing of the newsletter): <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/administration/telemetry-page-view-trace>

KQL samples are both added as part of the documentation article above and also available on BCTech here:

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

**PTE validation signal (came in September/October 2023)**

Non-compatible 3rd party apps (per-tenant extensions) can block upgrades to next major version of Business Central if they cannot compile on that version. In the Business Central service, we proactively validate all environments regularly against the next release. If an environment is not ready to be updated, then we send an email to the administrator and starting from September 2023, we also emit telemetry on these validations.

With this telemetry, partners can monitor environments for the customers and setup alerts so that they know up front which customers will need help prior to updating to the next major version of Business Central.

Read more in the documentation here (might not be live at the time of the publishing of the newsletter): <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/administration/telemetry-environment-validation-trace>

KQL samples are both added as part of the documentation article above and also available on BCTech here:

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

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

PTE upload failures. Early KQL samples is available now. Check them out here:

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

Business Events lifecycle events (coming in 23.x).

Early KQL samples is available now. Check them out here: <https://github.com/microsoft/BCTech/blob/master/samples/AppInsights/KQL/Queries/ExampleQueriesForEachArea/BusinessEvents.kql>

Onboarding telemetry: format data of date dimensions

# Documentation updates

**Best practices for designing telemetry events.**

We got feedback on some of the best practices for designing telemetry events in app/extension telemetry. So, we added some guidance to docs. Here goes:

When the Business Central product team designed the partner telemetry feature, we build the following characteristics into it:

Telemetry event definitions must treat as an API. Changing custom dimensions is a breaking change (someone might have built reporting or alerting on top of it).

Telemetry events must be discoverable in docs. If you see someting in telemetry, it should be easy to learn more about it in documentation. We added the custom dimension eventId because of this. It is good practice to keep eventIds unique, also across apps/extensions.

Documented: each telemetry event has good documentation, preferably with guidance on how to react on this event.

Actionable (if possible): before we add a new telemetry event, we ask "what can a customer/partner do with this?" If no good answers come to mind, we do not add the event.

Now also live on docs here:

<https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/developer/devenv-instrument-application-for-telemetry-app-insights#best-practices-for-designing-telemetry-event>

**Allowed HTTP headers for telemetry.**

For privacy and security reasons, the Business Central server maintains a list of HTTP headers that are allowed to be emitted to telemetry.

The following HTTP headers are emitted to telemetry (if set in the request)

Accept

Accept-Charset

Accept-Encoding

Accept-Language

Allow

client-request-id

Connection

Content-Encoding

Content-Language

Content-Length

Content-Type

Data-Access-Intent

Expect

If-Match

isolation

odata-isolation

OData-MaxVersion

OData-Version

postman-token

Prefer

request-id

return-client-request-id

Transfer-Encoding

User-Agent

x-forwarded-host

x-forwarded-path

x-forwarded-port

x-forwarded-proto

Now also live on docs here:

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

# Tips and tricks

N/A this month.

# Blog posts and videos

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 November 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)