Business Requirements Document

Global Cloud Cube, Cloud Build Performance Extension

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| Introduction |
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| This document will serve as the business requirements for the Cloud Build performance Cube extension and will provide the necessary information to understand what features are required to be implemented. |

| Purpose |
| --- |
| This Project will enrich cloud space analysis by adding data related to instance build performance. It will be possible to categorize revenue based on build success and build time and show relationships to other metrics such as NPS. This project enables holistic view of all existing customer related measures along with build performance. |

| Intended Audience | | |
| --- | --- | --- |
| Role | International | US |
| Executive Sponsor | JP Coetzee | n/a |
| Product Owner | JP Coetzee | n/a |
| Operations / Business Analyst | JP Coetzee | n/a |
| Project Manager | n/a | n/a |
| Other Stake Holders | Robert Bell  Marcus Niklasson  Stephen Waller | n/a |
| UAT | tbc | n/a |
|  |  |  |

| Scope |
| --- |
| **KBQs we will be able to answer through cloud cube are,**   1. List all accounts (DDI’s) along with their names who spend more than [£XXX] and have encountered more than [y] failed builds or have a median build time in excess of  [z] minutes. 2. List the number of product consumed per DDI for where the build failure % exceeds [a] minutes.   **Answering below KBQs will require a lot of space on LONDB03, which will affect project delivery.**   1. List all the instances, which took more that [x] minutes to build along with the time at which the build was initiated. 2. List all instances for account (DDI) [a] and their build start time – this will enable us to build a profile of when our customers are most active within our environments   **Maximum level of detail possible for a given measure will be,**  DDI  Activity Day  Instance  Build state  **Lowest Measure available will be,**  Build duration (min , max , avg , stddev , sum , mod)  Build counts (min , max , avg , stddev , sum , mod) |

| Assumptions | |
| --- | --- |
| 1 DDI can have 1 or many instances and 1 instance can have 1 or many build events in any given day. |
| Every dimension is pre-existing in the cloud cube outside of the build data during cube processing time. So in other words if we have any build data for DDI ABC and Instance XYZ , both ABC and XVZ has to exists in dim\_accounts and dim\_instances of cloud cube at the time of processing this record. |
| It is acceptable that this data is not real time and will refresh once a day and may be up to 24 hours old. |
| It is acceptable that data retention will be in line with the existing FACT tables within The Global Cloud Cube. |
| It is acceptable that the change history for related dimensions will remain as they are in the cube today. |
| Calculations that on rely on additional information not provided by Stacktach are agreed to be out of scope of this enhancement. |

| Constraints | |
| --- | --- |
| **Constraint** | **Impact** |
| Available Storage Capacity | The level of granularity that can be reported on will be limited to the amount of available storage capacity remaining on the LONDB03 server. |
|  |  |

| Dependencies | |
| --- | --- |
| Dependency | Description |
| Cloud cube | Existing Data model and ETL set up of Cloud Cube |
| Stacktach Events | Data captured in Stacktach.events table on the Hive cluster of global data platform team. |

| Functional Requirements |
| --- |

| Requirement Details | Description |
| --- | --- |
| [Req #] |  |
| Title |  |
| Priority |  |
| Purpose |  |
|  |  |
| [Req #] |  |
| Title |  |
| Priority |  |
| Purpose |  |
|  |  |

| Non-Functional Requirements | |
| --- | --- |
| Requirement Details | Description |
| [Req #] | NF001 |
| Title | Error Handling |
| Purpose | Code should be implemented with a good level of graceful error handling. Issues within the ETL job due to null values, changes in schema or transaction deadlocks should not cause the entire Cloud Cube job to fail. These events should be managed within the ETL process to extract as much data as possible flagging elements that need additional investigation. |

Appendix A: Approvals

| Approver Name | Title | Signature | Date |
| --- | --- | --- | --- |
| Neha Bhatt | BI Developer - US |  |  |
| Patrick Booth | Director Business Intelligence Development - UK |  |  |
| JP Coetzee | Head Enterprise Services - UK |  |  |
|  |  |  |  |