APS to SQLDW Migration Assessment Architecture Design Session

Date: July 17, 2017

Site location: Capital Group - 333 S Hope St, Los Angeles, CA 90071

**Architecture Design Session Objectives**

* Discovery of client’s business needs, environment and technical requirements
* Provide overview of Azure SQL DW or MS APS solution
* Provide guidance on possible high level solution approaches that meets business needs

**Customer Attendees:**

We request the following roles to attend to maximize the usefulness of the resulting deliverables:

* Business Sponsor
* Enterprise Architects
* APS Database Administrators
* Application Owners
* APS Developers
* ETL Developers
* Infrastructure/Network/Operations SME’s
* Security

In preparation for the workshop, please be ready to discuss:

Business Requirements

* Key Business Drivers
* Migration Goals
* Risk Factors
* Expectations
* Program Milestones

Current Environment Details

* Solution Architecture
* Operations and monitoring
* Change Management
* Infrastructure
* HA/DR

**High Level Agenda:**

**Day 1:** Half day – Intro and Current APS Issues and Overview

**Day 2:** PDW – DB’s and ETL Process

**Day 3:** PDW – Reporting, Scheduling and Secutiry(Azure)

**Day 4:** PDW – Review and Solution Design Possibilities

**Day 5:** Half Day - HDI - Intro and Current APS Issues and Overview

**Day 6:** HDI – Hive Scripts, Reporting and Scheduling

**Day 7:** HDI – Security(Azure) andHDIReview and Solution Design Possibilities

**Day 8:** Half day -HDI & APS-Review and Solution Design Possibilities

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| ***APS Migration Assessment and Data Warehousing Architecture Design Session***  ***Proposed Agenda – Day 1*** | | |
| ***Time*** | ***Topic*** | ***Presenter*** |
| 1:00 – 2:45 PM | **Welcome**   * Introduction of participating parties * Goals for the Assessment * Migration Overview * Environment Overview – high level * How are you using Azure today? | *Microsoft & Customer led* |
| 3:00 – 4:30 PM | **Mutual Discovery *(Example topics to be covered)***  *Business*   * Review and prioritize customer objectives to be achieved in the ADS session * Key business drivers * Key business issues that solution must address * Success Factors for the solution * Short term and long term vision * Risk Factors * Project Goals * Program Milestones   *Technology*   * Review current state ( Organization/Apps/IT & Projects teams) * Customer requirements for data warehousing * Current state implementation * Complete list of challenges * Prioritize top issues * Impact of top issues * Current Architecture * Code Promotion Process | *Customer led* |
| 4:30 – 5:00 PM | **Plan Next Steps and Wrap-up** | *Microsoft led* |

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| ***APS Migration Assessment and Data Warehousing Architecture Design Session***  ***Proposed Agenda – Day 2*** | | |
| ***Time*** | ***Topic*** | ***Presenter*** |
| 9:00 – 9:15 | **Day 1 Recap & Q&A**  Quick Recap of Day 1 and expectations for Day 2 | *Microsoft led* |
| 9:15 – 10:45 AM  (breaks as needed) | **Mutual Discovery *(Example topics to be covered)***  *Technology - Continued*   * DB design standards (star/normalized/other) * Db sizes/#ta*b*les * Future growth factor * Data Loading scenarios - Batch windows * Query Performance/Workloads types and SLAs * Concurrency * Big data use case, if there is any * Integration with other systems * HA/DR requirements * Current BI Reporting methods | *Customer led* |
| 11:00 – 11:45 | **Microsoft Data Warehouse Solutions discussion**   * Current Microsoft Azure DW solution offerings   + SQLDW, Azure Data Lake * Differences between APS & SQLDW | *Microsoft led* |
| 12:00PM – 1:00 PM | **Lunch** | *All* |
| 1:00 – 3:30 PM  (breaks as needed) | **Mutual Discovery *(Example topics to be covered)***  *Technology – Continued*   * *ETL & Orchestration Process*   + Sources   + Sample ETL/ELT Processes   + Number of Jobs   + Job Schedule   + Need for Real-time Data     - Define Real-time   + Deep Dive into ETL\ELT Process | *Customer led* |
| 3:30 – 4:00 PM | **Plan Next Steps and Wrap-up** | *Microsoft led* |
| 4:00 – 5:00 PM | **MS Documentation Time** | *Microsoft led* |

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| ***APS Migration Assessment and Data Warehousing Architecture Design Session***  ***Proposed Agenda – Day 3*** | | |
| ***Time*** | ***Topic*** | ***Presenter*** |
| 9:00 – 9:15 AM | **Day 2 Recap & Q&A**  Quick Recap of Day 2 and expectations for Day 3 | *Microsoft led* |
| 9:15 – 10:45 AM | **Mutual Discovery *(Example topics to be covered)***  *Technology - Continued*   * Reporting Needs * Current Tools * Cloud Strategy for reporting * Reporting tools   + OLAP Tools   + Query Tools | *Customer led* |
| 11:00 – 11:45 AM | **Mutual Discovery *(Example topics to be covered)***  *Technology - Continued*   * ETL/Report Scheduling System/Tool * Sample job * Review jobs | *Customer led* |
| 12:00 – 1:00 PM | **Lunch** | *All* |
| 1:00 – 2:45 PM | **Mutual Discovery (Example topics to be covered)**  **Technology – Continued**   * Security   + Security structure for Reporting   + Security structure for DB   + Network and Security requirements for Azure   + Data migration security needs   + Monitoring | *Customer led* |
| 3:00 – 3:30 PM | **Plan Next Steps and Wrap-up** | *Microsoft led* |
| 3:30 – 5:00 PM | **MS Documentation Time** | *Microsoft led* |

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| ***APS Migration Assessment and Data Warehousing Architecture Design Session***  ***Proposed Agenda – Day 4*** | | |
| ***Time*** | ***Topic*** | ***Presenter*** |
| 9:00 – 9:15 AM | **Day 4 Recap & Q&A**  Quick Recap of Day 3 and expectations for Day 4 | *Microsoft led* |
| 9:15 – 11:45 AM | **Potential Solution discussion – APS only**   * Architecture design/blueprint of solution * Migration Planning   + DB Dependencies and migration order   + Data Migration   + Schema migration   + Code Migration     - ETL/ELT * Questions/concerns | *Microsoft led & Customer led* |
| 12:00 – 1:00 PM | **Lunch** | *All* |
| 1:00 – 3:45 PM | **Potential Solution discussion**   * + Continuation from Morning | *Microsoft led & Customer led* |
| 4:00 – 4:15 PM | **Plan Next Steps and Wrap-up** | *Microsoft led* |

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| ***APS Migration Assessment and Data Warehousing Architecture Design Session***  ***Proposed Agenda – Day 5(Hadoop)*** | | |
| ***Time*** | ***Topic*** | ***Presenter*** |
| 1:00 – 1:15 AM | **Day 5 Recap & Q&A**  Quick Recap of Day 4 and expectations for Day 5 and the Week | *Microsoft led* |
| 1:15 – 3:45 AM | **Mutual Discovery *(Example topics to be covered)***  *Technology*   * Review current state of Hadoop * Customer requirements for big data * Current state implementation * Complete list of challenges * Prioritize top issues * Impact of top issues * Current Architecture * Data Flow * Environments * Code Promotion Process * DB’s Uses – Hive, Hbase…. * Db sizes/#ta*b*les * Future growth factor * Data Loading scenarios - Batch windows * Query Performance/Workloads types and SLAs * Concurrency | *Customer led* |
| 4:00 – 4:30 PM | **Plan Next Steps and Wrap-up** | *Microsoft led* |
| 4:30 – 5:00 PM | **MS Documentation Time** | *Microsoft led* |

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| ***APS Migration Assessment and Data Warehousing Architecture Design Session***  ***Proposed Agenda – Day 6(Hadoop)*** | | |
| ***Time*** | ***Topic*** | ***Presenter*** |
| 9:00 – 9:15 AM | **Day 5 Recap & Q&A**  Quick Recap of Day 5 and expectations for Day 6 | *Microsoft led* |
| 9:15 – 11:45 PM | **Mutual Discovery (Example topics to be covered)**  *Technology – Continued*   * ETL * Sample jobs\scripts   + Hive\pig * Review jobs   Number of scripts | *Customer led* |
| 11;45 – 1:00 PM | **Lunch** |  |
| 1:00 – 1:45 PM | **Mutual Discovery *(Example topics to be covered)***  *Technology - Continued*   * Reporting Needs * Current Tools * Cloud Strategy for reporting * Reporting tools   + OLAP Tools   + Query Tools   Other Tools R, SAS, APS & SQLDW | *Customer led* |
| 2:00 – 2:45 AM | **Mutual Discovery *(Example topics to be covered)***  *Technology - Continued*   * ETL/Report Scheduling System * Sample jobs   Review jobs | *Customer led* |
| 3:00 – 3:30 PM | **Plan Next Steps and Wrap-up** | *Microsoft led* |
| 3:30 – 5:00 PM | **MS Documentation Time** | *Microsoft led* |

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| ***APS Migration Assessment and Data Warehousing Architecture Design Session***  ***Proposed Agenda – Day 7(Hadoop)*** | | |
| ***Time*** | ***Topic*** | ***Presenter*** |
| 9:00 – 9:15 AM | **Day 6 Recap & Q&A**  Quick Recap of Day 6 and expectations for Day 7 | *Microsoft led* |
| 9:15 – 11:45 PM | **Mutual Discovery (Example topics to be covered)**  **Technology – Continued**   * Security   + Security structure for Reporting   + Security structure for DB   + Network and Security requirements for Azure   + Data migration security needs     - How do we move the data   + Monitoring | *Customer led* |
| 11:45 – 1:00 PM | **Lunch** |  |
| 1:00 – 3:45 | **Potential Solution discussion**   * Architecture design/blueprint of solution * Migration Planning   + DB Dependencies and migration order   + Data Migration   + Schema migration   + Code Migration     - ETL/ELT   Questions/concerns | *Microsoft led & Customer led* |
| 4:00 – 4:30 PM | **Plan Next Steps and Wrap-up** | *Microsoft led* |
| 4:30 – 5:00 PM | **MS Documentation Time** | *Microsoft led* |

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| ***APS Migration Assessment and Data Warehousing Architecture Design Session***  ***Proposed Agenda – Day 8*** | | |
| ***Time*** | ***Topic*** | ***Presenter*** |
| 9:00 – 9:15 AM | **Day 7 Recap & Q&A**  Quick Recap of Day 7 and expectations for Day 8 | *Microsoft led* |
| 9:15 – 11:45 AM | **Potential Solution discussion**   * Architecture design/blueprint of solution * Migration Planning   + DB Dependencies and migration order   + Data Migration   + Schema migration   + Code Migration     - ETL/ELT * Questions/concerns | *Microsoft led & Customer led* |
| 11:45 – 5:00 | **MS Documentation Time** | *Microsoft led* |