## MAXDAT Contact Center Configuration Analysis

### Introduction

Prior to installation of the MAXDAT Contact Center modules, an analysis of the source data in the contact center infrastructure must be completed. This analysis must be paired with elicitation sessions with project SMEs to understand the business context of the source data. The output of this analysis is the set of data to be used to initialize the MAXDAT Contact Center configuration tables. The configuration tables contain information related to the following.

* MAXIMUS business context for enriching source data
* Information on how to filter source data

### Staging Tables

The configuration tables include the following tables in the staging area.

* CC\_C\_ACTIVITY\_TYPE
* CC\_C\_CONTACT\_QUEUE
* CC\_C\_FILTER
* CC\_C\_LOOKUP
* CC\_C\_PROJECT\_CONFIG
* CC\_C\_UNIT\_OF\_WORK

### Dimensional Tables

Additionally the configuration data is used to pre-populate the following tables in the dimensional area.

* CC\_D\_ACTIVITY\_TYPE
* CC\_D\_CONTACT\_QUEUE
* CC\_D\_COUNTRY
* CC\_D\_DISTRICT
* CC\_D\_GEOGRAPHY\_MASTER
* CC\_D\_PROD\_PLANNING\_TARGET
* CC\_D\_PROGRAM
* CC\_D\_PROJECT
* CC\_D\_PROJECT\_TARGETS
* CC\_D\_PROVINCE
* CC\_D\_REGION
* CC\_D\_SITE
* CC\_D\_STATE
* CC\_D\_UNIT\_OF\_WORK

### Configuration Spreadsheet

Configuration data is captured in a spreadsheet format. The purpose of the spreadsheet is twofold. First, it provides a format which is easily reviewable by analysts, developers and project SMEs. Secondly, Pentaho Kettle has the ability to use a spreadsheet as a data source. So the spreadsheet itself is used in the job to initialize the MAXDAT Contact Center tables.

The spreadsheet currently has 10 tabs that need to be populated. Additional tabs may need to be added in the future to facilitate additional data contexts. E.g., the forthcoming standard IVR file format from Contact Solutions will necessitate a tab to capture the Dialed Number Identification Service (DNIS) values used to identify the project/program context of the IVR data.

A MAXDAT analyst or developer should pre-populate the contents of the spreadsheet based on an analysis of the source data. Once a draft has been completed, this should be reviewed with the project SME so that the SME can be provided with the appropriate context for the data that the MAXDAT team needs. During the review, the spreadsheet can be edited and/or the spreadsheet can be provided to the SME to make additional edits.

Once a second draft is completed after review/edits with the SME, the spreadsheet should be used to initialize the data in a DEV environment. After testing in the DEV environment, additional edits may need to be made to the spreadsheet and the DEV environment will need to be truncated and re-initialized. This process may be repeated.

Once the MAXDAT Contact Center modules have been deployed to a UAT environment, the spreadsheet should be considered baselined and locked. Any further changes to configuration tables should come in the form of patch scripts.

The following section will provide an overview of each tab and its relationship to the source data.

### Projects

The Projects tab is the data source for the following tables.

* CC\_C\_PROJECT\_CONFIG
* CC\_D\_PROJECT
* CC\_D\_PROGRAM
* CC\_D\_COUNTRY
* CC\_D\_REGION
* CC\_D\_DISTRICT
* CC\_D\_PROVINCE
* CC\_D\_STATE

The analysis exercise to populate the Projects tab consists of a review with the project SMEs to understand what are the MAXIMUS projects and programs that are serviced by the contact center. The country, region, district, province and state make up the attributes of the geography in which the contact center resides.

### Contact Queues

The Contact Queues tab is the data source for the following tables.

* CC\_C\_CONTACT\_QUEUE
* CC\_C\_FILTER

The analysis exercise to populate the Contact Queues tab includes an analysis of the source data to determine which contact queues have activity for the past year. An example query for the Avaya data source is as follows:

-- Distinct queues offered calls in the past year

select distinct a.Name

from Application a

inner join dApplicationStat das on a.ApplicationID = das.ApplicationID

where "Timestamp" > DATEADD(yy, -1, {fn CURDATE})

and CallsOffered > 0;

After compiling the initial list of queues with activity, this list should be reviewed with a project SME to confirm the queues to be extracted and understand the association of queue to project/program, service levels and the type of the queue (Inbound/Outbound/Vmail/Webchat). Typically, the SME will identify which queues are “test” or “master” queues and should not be reported on.

Additionally, the production planner should be able to provide the association to unit of work.

### Skillsets

The Skillsets tab is the data source for the following tables.

* CC\_C\_FILTER
* CC\_C\_LOOKUP

The analysis exercise to populate the Skillsets tab includes an analysis of the source data to determine which skillsets have activity for the past year. An example query for the Avaya data source is as follows.

-- Distinct skill groups offered calls in the past year

select distinct s.Skillset

from Skillset s

inner join dAgentBySkillsetStat dass on s.SkillsetID = dass.SkillsetID

where "Timestamp" > DATEADD(yy, -1, {fn CURDATE})

and CallsOffered > 0;

After compiling the initial list of skillsets with activity, this list should be reviewed with a project SME to confirm the skillsets to be extracted and to understand the association of skillset to project and program.

### Staff Groups

The Staff Groups tab is the data source for the following tables.

* CC\_C\_FILTER
* CC\_C\_LOOKUP

The analysis exercise to populate the Staff Groups tab includes an analysis of the source data to determine which staff groups have active associations to agents. An example query for the Pipkins data source is as follows.

-- select the distinct set of staff groups that are active

select distinct sg.name staff\_group\_name

from staff s

inner join staff\_group\_to\_staff sgs on s.staff\_id = sgs.staff\_id

inner join staff\_group sg on sgs.staff\_group\_id = sg.staff\_group\_id

where sgs.end\_date is null

order by sg.name;

After compiling the initial list of active staff groups, this list should be reviewed with a project SME to confirm the staff groups to be extracted and to understand the association of staff group to project and program. The project SME will need to identify which of the staff groups represent “master” staff groups. The “master” staff groups are defined as the set of groups to which all relevant agents will be associated to one and only one group.

### Departments

The Departments tab is not currently used.

### Activity Type Categories

The Activity Type Categories tab is provided as a reference for use by the MAXDAT team and project SME to populate the Activity Types tab. The category definitions provide insight into how the activity types should be categorized and how to set the “IS\_AVAILABLE\_FLAG” AND “IS\_READY\_FLAG” values.

### Activity Types

The Activity Types tab is the data source for the following tables.

* CC\_C\_ACTIVITY\_TYPE
* CC\_D\_ACTIVITY\_TYPE

The analysis exercise to populate the Activity Types tab includes an analysis of the source data to determine which activity types have been recorded in the WFM over the last year. An example query for the Pipkins data source is as follows.

-- select the distinct events recorded over the past year

select distinct e.name event\_name

from task t

inner join event e on t.event\_id = e.event\_id

where task\_edit\_id = 0

and t.task\_start > sysdate + interval '-1' year;

The initial population of the ACTIVITY\_TYPE\_CATEGORY, IS\_PAID\_FLAG, IS\_AVAILABLE\_FLAG, IS\_READY\_FLAG and IS\_ABSENCE FLAG can be done by reviewing the activity name and making an educated guess. A comparison to prior installations can also be helpful. If the confidence level of a given educated guess is low, then defer to the project SME. A project SME should be able to provide the correct categorization.

Example activity types and their classification can be found below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ACTIVITY\_TYPE\_NAME | ACTIVITY\_TYPE\_CATEGORY | IS\_PAID | IS\_AVAILABLE | IS\_READY | IS\_ABSENCE |
| CSS I - SHOP | Available | 1 | 1 | 0 | 0 |
| CSS II - SHOP | Available | 1 | 1 | 0 | 0 |
| CSS III | Available | 1 | 1 | 0 | 0 |
| Break | Lunch and Break | 1 | 0 | 0 | 0 |
| Lunch | Lunch and Break | 0 | 0 | 0 | 0 |
| Team Meeting | Meeting | 1 | 0 | 0 | 0 |
| Account Correction | Other Not Ready | 0 | 0 | 0 | 0 |
| Application in Process | Other Not Ready | 1 | 0 | 0 | 0 |
| Beginning of Attendance | Other Not Ready | 1 | 0 | 0 | 0 |
| Holiday | Scheduled PTO | 1 | 0 | 0 | 1 |
| Off | Scheduled PTO | 1 | 0 | 0 | 1 |
| Safety Training | Training | 1 | 0 | 0 | 0 |
| Training | Training | 1 | 0 | 0 | 0 |
| Early Departure | Unscheduled PTO | 0 | 0 | 0 | 1 |
| Late Start | Unscheduled PTO | 1 | 0 | 0 | 1 |
| Sick | Unscheduled PTO | 0 | 0 | 0 | 1 |

### ACD Periods

The Activity Types tab is the data source for the following tables.

* CC\_C\_LOOKUP

The ACD Periods tab provides the configuration for the association of the Avaya ABDDELAY and ANSDELAY fields to the CALLS\_ABANDONED\_PERIOD and SPEED\_OF\_ANSWER\_PERIOD fields respectively. The MAXDAT Contact Center data model allows for capture of 10 different periods whereas the Avaya data source allows for the capture of 60 different periods. This set of lookups satisfies the business requirement to provide the ability to configure the association of Avaya period to MAXDAT period.

Unless requested by a business analyst, this tab does not need to change.

### Units of Work

The Units of Work tab is the data source for the following tables.

* CC\_C\_UNIT\_OF\_WORK
* CC\_D\_UNIT\_OF\_WORK

The definition of the valid units of work should be provided by the production planner. In the absence of a production planner, units of work can be created based on a logical grouping of contact queues.

### Geography

The Geography tab is the data source for the following tables

* CC\_D\_GEOGRAPHY\_MASTER

The analysis exercise to populate the Geography tab is to identify the country, state, province, district and region in which the contact center resides. This tab is dependent on the previously defined geographical attributes from the Projects tab.

### Project Targets

The Project Targets tab is the data source for the following table.

* CC\_D\_PROJECT\_TARGET

The project target dimension is currently not used in full. The analysis exercise to populate the project targets table is to create a dummy record for each project.