Text-Based Import into the Barista Data Dictionary

Note: Requires Barista 11.10RC or later.

Introduction

The text file import into the Barista Data Dictionary (DD) offers legacy application developers a direct way to get their custom data dictionary definitions into the Barista framework via a given set of six tab-delimited (CSV) files.

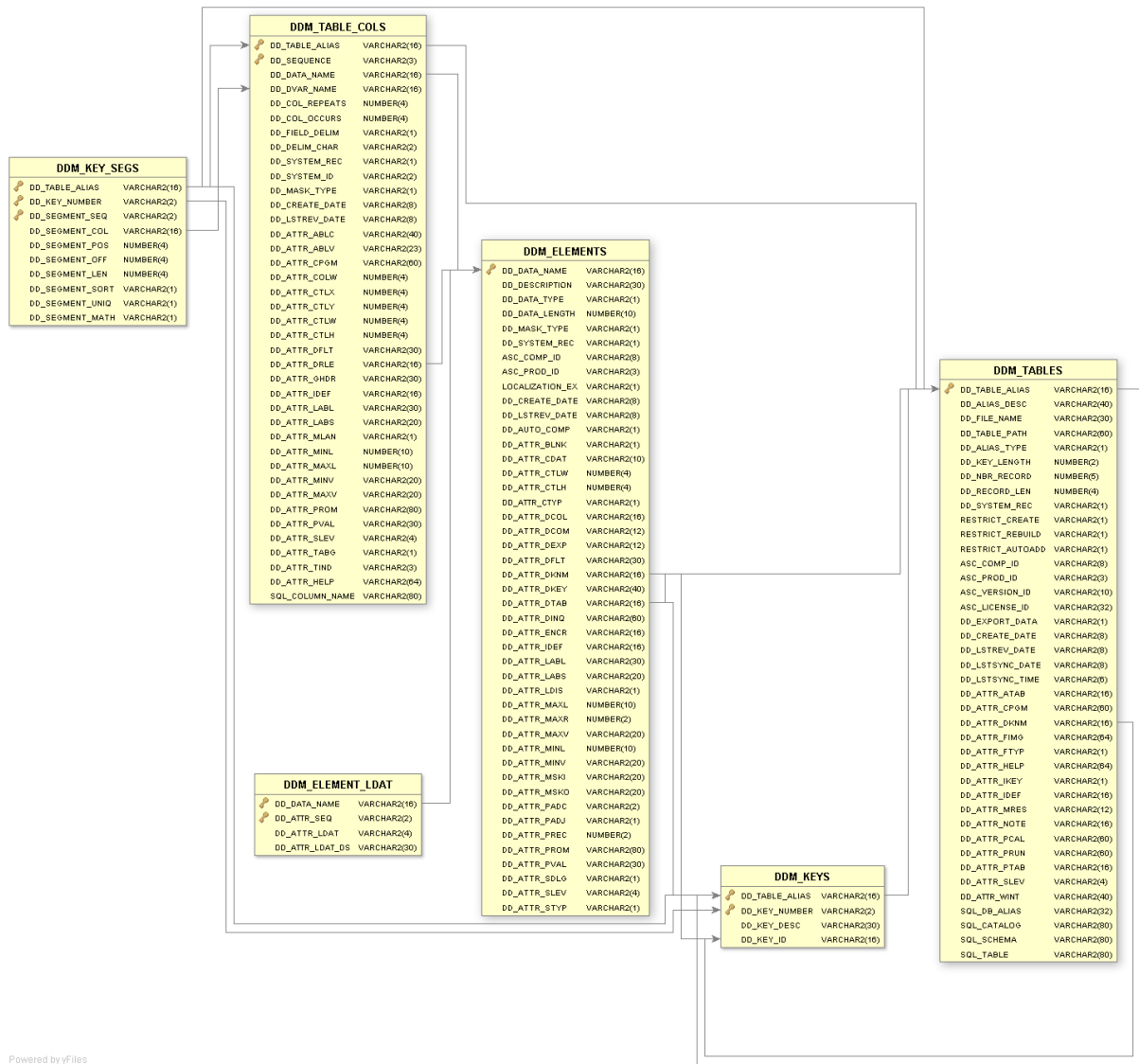## Text File Architecture and Requirements

Each of the six text files must exist in the same directory and contain at least a header line with tab-delimited column names representing the required and optional data to import. The column names are based on the corresponding table templates in Barista and their correlation can be seen in the Element Type and Table Maintenance forms.

The six required file names are:

1. `imp_tables.txt`
2. `imp_elements.txt`
3. `imp_table_cols.txt`
4. `imp_keys.txt`
5. `imp_key_segs.txt`
6. `imp_element_ldat.txt`

The order of the files above mirrors the sequence in which they are processed during the import.

For a successful import, the relationships between the files need to be upheld as shown in the diagram on the next page.

DDM_TABLE_COLS

Column	Type
DD_TABLE_ALIAS	VARCHAR2(16)
DD_SEQUENCE	VARCHAR2(3)
DD_DATA_NAME	VARCHAR2(16)
DD_DVAR_NAME	VARCHAR2(16)
DD_COL_REPEATS	NUMBER(4)
DD_COL_OCCURS	NUMBER(4)
DD_FIELD_DELIM	VARCHAR2(1)
DD_DELIM_CHAR	VARCHAR2(2)
DD_SYSTEM_REC	VARCHAR2(1)
DD_SYSTEM_ID	VARCHAR2(2)
DD_MASK_TYPE	VARCHAR2(1)
DD_CREATE_DATE	VARCHAR2(8)
DD_LSTREV_DATE	VARCHAR2(8)
DD_ATTR_ABLC	VARCHAR2(40)
DD_ATTR_ABLV	VARCHAR2(23)
DD_ATTR_CPGM	VARCHAR2(60)
DD_ATTR_COLW	NUMBER(4)
DD_ATTR_CTLX	NUMBER(4)
DD_ATTR_CTLY	NUMBER(4)
DD_ATTR_CTLW	NUMBER(4)
DD_ATTR_CTLH	NUMBER(4)
DD_ATTR_DFLT	VARCHAR2(30)
DD_ATTR_DRLE	VARCHAR2(16)
DD_ATTR_GHDR	VARCHAR2(30)
DD_ATTR_IDEF	VARCHAR2(16)
DD_ATTR_LABL	VARCHAR2(30)
DD_ATTR_LABS	VARCHAR2(20)
DD_ATTR_MLAN	VARCHAR2(1)
DD_ATTR_MINL	NUMBER(10)
DD_ATTR_MAXL	NUMBER(10)
DD_ATTR_MINV	VARCHAR2(20)
DD_ATTR_MAXV	VARCHAR2(20)
DD_ATTR_PROM	VARCHAR2(80)
DD_ATTR_PVAL	VARCHAR2(30)
DD_ATTR_SLEV	VARCHAR2(4)
DD_ATTR_TABG	VARCHAR2(1)
DD_ATTR_TIND	VARCHAR2(3)
DD_ATTR_HELP	VARCHAR2(64)
SQL_COLUMN_NAME	VARCHAR2(80)

DDM_KEY_SEGS

Column	Type
DD_TABLE_ALIAS	VARCHAR2(16)
DD_KEY_NUMBER	VARCHAR2(2)
DD_SEGMENT_SEQ	VARCHAR2(2)
DD_SEGMENT_COL	VARCHAR2(16)
DD_SEGMENT_POS	NUMBER(4)
DD_SEGMENT_OFF	NUMBER(4)
DD_SEGMENT_LEN	NUMBER(4)
DD_SEGMENT_SORT	VARCHAR2(1)
DD_SEGMENT_UNIQ	VARCHAR2(1)
DD_SEGMENT_MATH	VARCHAR2(1)

DDM_ELEMENTS

Column	Type
DD_DATA_NAME	VARCHAR2(16)
DD_DESCRIPTION	VARCHAR2(30)
DD_DATA_TYPE	VARCHAR2(1)
DD_DATA_LENGTH	NUMBER(10)
DD_MASK_TYPE	VARCHAR2(1)
DD_SYSTEM_REC	VARCHAR2(1)
ASC_COMP_ID	VARCHAR2(8)
ASC_PROD_ID	VARCHAR2(3)
LOCALIZATION_EX	VARCHAR2(1)
DD_CREATE_DATE	VARCHAR2(8)
DD_LSTREV_DATE	VARCHAR2(8)
DD_AUTO_COMP	VARCHAR2(1)
DD_ATTR_BLNK	VARCHAR2(1)
DD_ATTR_CDAT	VARCHAR2(16)
DD_ATTR_CTLW	NUMBER(4)
DD_ATTR_CTLH	NUMBER(4)
DD_ATTR_CTYP	VARCHAR2(1)
DD_ATTR_DCOL	VARCHAR2(16)
DD_ATTR_DCOM	VARCHAR2(12)
DD_ATTR_DEXP	VARCHAR2(12)
DD_ATTR_DFLT	VARCHAR2(30)
DD_ATTR_DKNM	VARCHAR2(16)
DD_ATTR_DKEY	VARCHAR2(40)
DD_ATTR_DTAB	VARCHAR2(16)
DD_ATTR_DINQ	VARCHAR2(80)
DD_ATTR_ENCR	VARCHAR2(16)
DD_ATTR_IDEF	VARCHAR2(16)
DD_ATTR_LABL	VARCHAR2(30)
DD_ATTR_LABS	VARCHAR2(20)
DD_ATTR_LDIS	VARCHAR2(1)
DD_ATTR_MAXL	NUMBER(10)
DD_ATTR_MAXR	NUMBER(2)
DD_ATTR_MAXV	VARCHAR2(20)
DD_ATTR_MINL	NUMBER(10)
DD_ATTR_MINV	VARCHAR2(20)
DD_ATTR_MSKI	VARCHAR2(20)
DD_ATTR_MSKO	VARCHAR2(20)
DD_ATTR_PADC	VARCHAR2(1)
DD_ATTR_PADJ	VARCHAR2(1)
DD_ATTR_PREC	NUMBER(2)
DD_ATTR_PROM	VARCHAR2(80)
DD_ATTR_PVAL	VARCHAR2(30)
DD_ATTR_SDLG	VARCHAR2(1)
DD_ATTR_SLEV	VARCHAR2(4)
DD_ATTR_STYP	VARCHAR2(1)

DDM_ELEMENT_LDAT

Column	Type
DD_DATA_NAME	VARCHAR2(16)
DD_ATTR_SEQ	VARCHAR2(2)
DD_ATTR_LDAT	VARCHAR2(4)
DD_ATTR_LDAT_DS	VARCHAR2(30)

DDM_KEYS

Column	Type
DD_TABLE_ALIAS	VARCHAR2(16)
DD_KEY_NUMBER	VARCHAR2(2)
DD_KEY_DESC	VARCHAR2(30)
DD_KEY_ID	VARCHAR2(16)

DDM_TABLES

Column	Type
DD_TABLE_ALIAS	VARCHAR2(16)
DD_ALIAS_DESC	VARCHAR2(40)
DD_FILE_NAME	VARCHAR2(30)
DD_TABLE_PATH	VARCHAR2(60)
DD_ALIAS_TYPE	VARCHAR2(1)
DD_KEY_LENGTH	NUMBER(2)
DD_NBR_RECORD	NUMBER(5)
DD_RECORD_LEN	NUMBER(4)
DD_SYSTEM_REC	VARCHAR2(1)
RESTRICT_CREATE	VARCHAR2(1)
RESTRICT_REBUILD	VARCHAR2(1)
RESTRICT_AUTOADD	VARCHAR2(1)
ASC_COMP_ID	VARCHAR2(8)
ASC_PROD_ID	VARCHAR2(3)
ASC_VERSION_ID	VARCHAR2(10)
ASC_LICENSE_ID	VARCHAR2(32)
DD_EXPORT_DATA	VARCHAR2(1)
DD_CREATE_DATE	VARCHAR2(8)
DD_LSTREV_DATE	VARCHAR2(8)
DD_LSTSYNC_DATE	VARCHAR2(8)
DD_LSTSYNC_TIME	VARCHAR2(6)
DD_ATTR_ATAB	VARCHAR2(16)
DD_ATTR_CPGM	VARCHAR2(60)
DD_ATTR_DKNM	VARCHAR2(16)
DD_ATTR_FIMG	VARCHAR2(64)
DD_ATTR_FTYP	VARCHAR2(1)
DD_ATTR_HELP	VARCHAR2(64)
DD_ATTR_IKEY	VARCHAR2(1)
DD_ATTR_IDEF	VARCHAR2(16)
DD_ATTR_MRES	VARCHAR2(12)
DD_ATTR_NOTE	VARCHAR2(16)
DD_ATTR_PCAL	VARCHAR2(60)
DD_ATTR_PRUN	VARCHAR2(60)
DD_ATTR_PTAB	VARCHAR2(16)
DD_ATTR_SLEV	VARCHAR2(4)
DD_ATTR_WINT	VARCHAR2(40)
SQL_DB_ALIAS	VARCHAR2(32)
SQL_CATALOG	VARCHAR2(80)
SQL_SCHEMA	VARCHAR2(80)
SQL_TABLE	VARCHAR2(80)

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With the exception of a couple of internal system columns, any of the other columns in the Barista tables seen in the diagram above may be present in the import file. There are only a few required columns per record that must be filled for the record to be imported. Here is a list of the required and recommended columns:

imp_tables.txt (DDM_TABLES)

DD_TABLE_ALIAS
DD_ALIAS_DESC
DD_TABLE_PATH
DD_FILE_NAME
DD_ALIAS_TYPE

imp_elements.txt (DDM_ELEMENTS)

DD_DATA_NAME
DD_DESCRIPTION
DD_DATA_TYPE
DD_DATA_LENGTH
DD_ATTR_LABL (*recommended, defaults to DD_DESCRIPTION)
DD_ATTR_LABS (*recommended, defaults to DD_ATTR_LABL)
DD_ATTR_CTYP (*recommended, defaults to character input ("E"))

imp_table_cols.txt (DDM_TABLE_COLS)

DD_TABLE_ALIAS
DD_SEQUENCE
DD_DATA_NAME
DD_DVAR_NAME
DD_FIELD_DELIM (*defaults to no field delimiter ("N"))
DD_DELIM_CHAR (*defaults to linefeed char ("0A") if DD_FIELD_DELIM="Y")

imp_keys.txt (DDM_KEYS)

DD_TABLE_ALIAS
DD_KEY_NUMBER
DD_KEY_DESC
DD_KEY_ID

imp_key_segs.txt (DDM_KEY_SEGS)

DD_TABLE_ALIAS
DD_KEY_NUMBER
DD_SEGMENT_SEQ
DD_SEGMENT_COL

imp_element_ldat.txt (DDM_ELEMENT_LDAT)

DD_DATA_NAME
DD_ATTR_SEQ
DD_ATTR_LDAT
DD_ATTR_LDAT_ds

Primary Barista Attribute Values

Here is a recap of the permissible values for several attributes in Barista. Please refer to the "Getting Started" document for further details about the individual attributes.

DD_ALIAS_TYPE:

K	MKeyed File	X	XKeyed File	V	VKeyed File
M	Single MKeyed File	C	Serial File	D	Direct File
I	Indexed File	S	Sort File	Q	SQL Database Table
T	String File	O	Child Alias	P	Options Entry
R	Reference				

DD_ATTR_FTYP:

X	No Form Used	T	Maintenance Form	G	Maintenance Grid
S	Options Entry Form	R	Options Entry Grid	P	Yes/No Process

DD_ATTR_CTYP:

	(none)	E	CharacterEdit	e	CharacterSpinner
N	NumericEdit	n	NumericSpinner	D	DateEdit
d	DateSpinner	U	MultiLineEdit	L	ListButton
O	ListBox	C	CheckBox	I	Slider
R	RadioButtons	H	(none - Hidden)	X	(none - Ref Only)

DD_ATTR_LDIS:

O	Description	D	Description (Code)	C	Code - Description

Note: Defaults to "O" (letter "O"), if DD_ATTR_CTYP is a ListButton ("L") or ListBox ("O")

DD_ATTR_PADC:

(none)	20	Space	22	Quote
23 Pound (#)	2A	Asterisk (*)	2E	Period (.)
30 Zero	5E	Caret	5F	Underscore

DD_ATTR_PADJ   :

(none)	L Left	R Right

Note: Consider using padding and justification for key fields in particular.

DD_ATTR_SDLG:

(none)	O File Open	D Directory Open
S File Save	G Global Variable (STBL)	A Attachment

DD_ATTR_STYP:

(none)	1 Date (YYYYMMDD)	2 Date (YYYYMM)
3 Date (YYYY)	4 Date (YYMMDD)	5 Date (MMDD)
J Date (Julian)	6 Created Date Stamp	7 Revised Date Stamp
8 Created Time Stamp	9 Revised Time Stamp	A Time (HHMMSS)
B Time (HHMM)	C Time (MMSS)	P Postal Code
T Telephone	S Sequence Counter	I Image Path

Note: Sub-type "J" requires a 7-digit numerical data type. All other sub-types are designed to work with the character data type.

DD_DATA_TYPE:

C Character	N Number	I Integer
U Unsigned Integer	B Business Math	O Blob

Note: Barista requires that key fields have a base data type of character (C) or number (N).

DD_FIELD_DELIM:

Y	Yes
N	No
E	End
S	Escaped
P	Padded

DD_DELIM_CHAR:

(none)
00   00 - (000) - (NUL)
01   01 - (001) - (SOH)
...
FD   FD - (253)
FE   FE - (254)
FF   FF - (255)

Note: The field delimiter will default to 10 ($0A$), if DD_FIELD_DELIM="Y"

DD_MASK_TYPE:

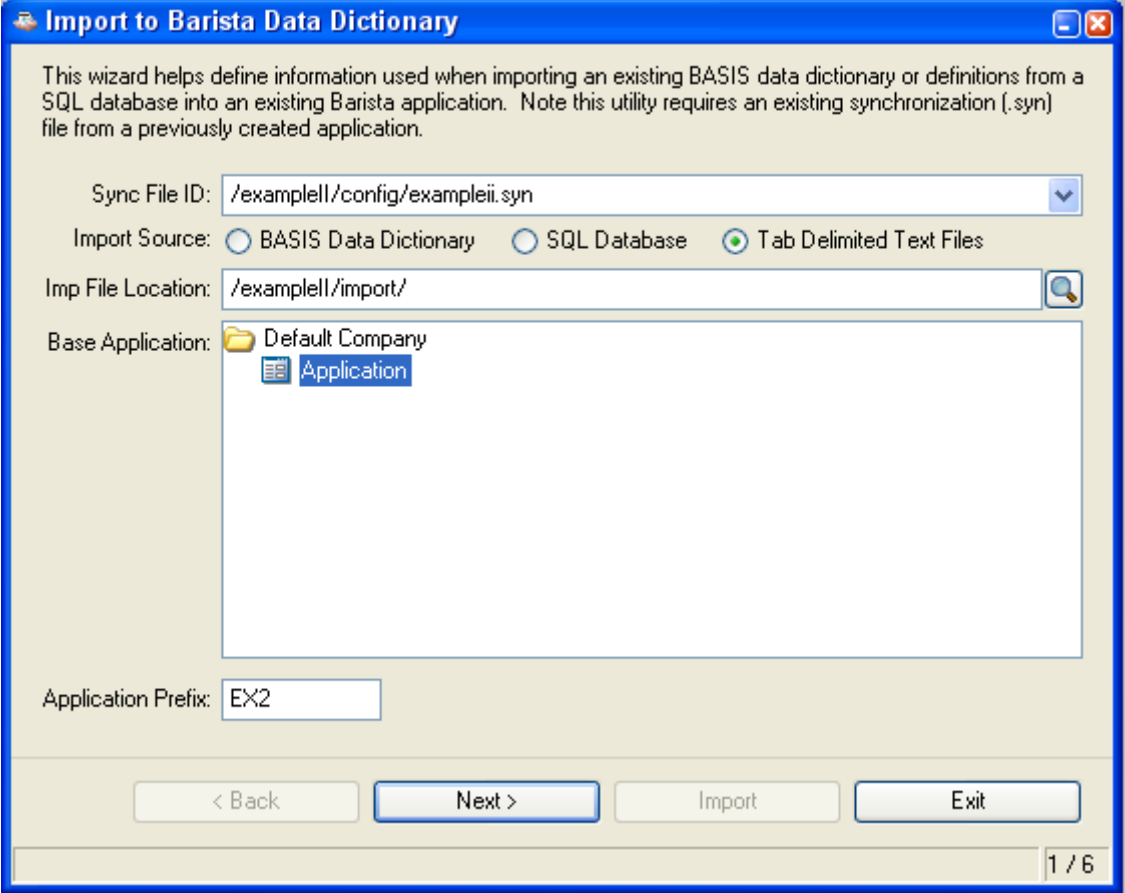| (none)	A Amount	I ID
U Units	% Percent	R Rate
E Extension	Q Quantity	C Cost
P Price	V Conv Factor	M Mtl Factor
O Ovhd Factor	H Hours	Z Zip Code
T Telephone		

Note: The use of the mask type requires that corresponding records are created under "Barista Administration/Maintenance/Input/Display Masks".

The General Import Process

First create an application under "Barista Development/Create Application", using your customer id at BASIS as the company id or "00000000" for development and testing that will not be deployed to end customers.

Run "Barista Development/Import To Barista Dictionary".

In the first frame of the import wizard, select the synchronization file you created and choose the "Tab Delimited Text Files" radio button. Enter or use the directory selection dialog to select the directory where the six import text files can be found. Enter an application prefix to use for prefixing your application object names, such as table and element names, in Barista to make finding them much easier and to help separate your application from other vertical apps that may be installed into Barista. Here is an example:

If an existing element type should be used, then you won't want it become automatically prefixed. To avoid prefixing, begin the element type name with an asterisk, like *FIRM_ID or *USER_ID.

The rest of the import process is the same for any of the three import source types. Please refer to the documentation dedicated to describing the import process for further details.