



# Smart Sync File Specifications

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## About Smart Sync™

Smart Sync™ is a standard developed by MobileQ to automate the process of transferring customer, route and delivery information between Headlight™ and any 3rd party billing or accounting system. There are two requirements for using Smart Sync: (a) automatically creating the necessary files in the specified format and (b) transferring the necessary files to the Headlight subscriber's drop box using FTP.

Headlight checks for new files every 15-30 minutes and automatically queue them into a batch job for processing. After processing is completed, the Headlight administrator receives an summary email with job information. It's recommended that Smart Sync files are created and sent to Headlight on a daily basis.

## General File Information

The data transferred to Headlight™ consists of three data files and a fourth "trigger" file.

1. **mobileiqcust.csv** contains basic account information including ID, Name, and Address
2. **mobileiqdeliv.csv** contains route information, delivery history, product quantities, revenue and frequency
3. **mobileiqprod.csv** contains product information including price, weight and volume for all SKUs
4. **uploadcompleted.txt** is an empty (0 byte) flag file that is deleted at the end of the Smart Sync process

## General CSV File Format Notes

- The data files are standard, comma delimited text files.
- Column headers must be included within all files as lower case, exactly as the field names appear in this specifications document. No additional punctuation in the column headers can be used.
- Fields that aren't used or available from the billing system should be left empty (i.e. placeholders) but must include the proper column header. Samples of all file formats are available from the MobileQ website.
- Each record is one line of ASCII text terminated by a CRLF (0x0D 0x0A).
- Fields are separated with commas.  
**e.g. John Smith,"100 Main St, 2nd Floor",Chicago,IL,08123**
- Leading and trailing whitespace are ignored.  
**e.g. Chicago , IL, ... resolves to "Chicago" and "IL", etc. Space characters can be spaces, or tabs.**
- Fields with embedded commas must be delimited with the double-quote character (0x22).

**e.g. In the above example. "100 Main St, 2nd Floor " had to be delimited in double quotes because it contains an embedded comma.**

- Fields that contain double-quote characters as part of the data must be surrounded by double-quotes, and the embedded double-quotes must each be represented by a pair of consecutive double quotes.

**e.g. John "Jonny" Smith would convert to "John ""Jonny"" Smith", "100 Main...**

- Contact and Company formatting: If an account is residential and the CONTACT field is blank, put the COMPANY data in CONTACT and blank out COMPANY.

### Special street field formatting

If your accounting system uses more than one field for service/delivery street information, use the following convention to help improve geocoding rates within Headlight:

If both ADDRESS1 and ADDRESS2, check if the 1st character in either is numeric (0-9).

a.) If one is and the other is not, put it first and concatenate the other with a space + pipe '|' + space characters.

b.) If both or neither start with a number, just put ADDRESS1 first. If either one is blank, don't concatenate the NULL string. For example:

ADDRESS 1	ADDRESS 2	STREET
123 Main St.	Suite 23	123 Main St   Suite 23
Attn: Joe	4568 State St	4568 State St   Attn: Joe
1000 Hwy A		1000 Hwy A

## Customer File Data Fields (mobileiqcust.csv)

- This file should contain one row for each ACTIVE delivery customer. The rows must be unique based upon the id number. The id number may represent an account number, contract number, or any other index number as specified in the host system. The id number provided CANNOT relate to multiple delivery/service locations.
- Delivery customers who have multiple accounts and/or contracts, even if they are delivered to the same address, should appear as multiple rows.
- Billing address information should be repeated in the appropriate fields, even if it is identical to the delivery (service) address information.

### Customer File mobileiqcust.csv

Field Name	Field Description	Field Format
id	Unique identifier for each active customer	VARCHAR(20)
company (*see note 1)	Company name	VARCHAR(255)
contact (*see note 1)	Customer contact name	VARCHAR(255)
phone	Customer phone number Example for format: 888-555-4444	VARCHAR(12)
street (*see note 2)	Delivery address without instructions	VARCHAR(255)
city	Delivery city	VARCHAR(255)
state	Delivery state (or province) using standard abbreviations	VARCHAR(2)

Field Name	Field Description	Field Format	
zip	Delivery zip code. If using Zip+4, Example for format: 33333-2222	VARCHAR(10)	
closed_times	Delivery times at which an account cannot be serviced. Value is in military time formatted as hh:mm-hh:mm. Separate multiple closed times with the '**' character. Note: unused on download if not tracked in accounting system	VARCHAR(20)	
	<b>Value</b>		<b>Meaning</b>
	09:00-11:30		closed from 9:00 am to 11:30 am
	11:20-13:00		closed from 11:20 am to 1:00 pm
	15:00-18:00		closed from 3:00 pm to 6:00 pm
	09:00-11:30*15:00-18:00	closed from 9:00 am to 11:30 am AND 3:00 pm to 6:00 pm	
startdate	Date when account was created. Example for format: '1/1/2005'	DATE	
custtype	'C' = commercial, 'R' = residential. 'I' = Industrial  Leave blank if unused.	VARCHAR(1)	
payment	Charge or cash account  Valid Values: Cash or Charge	VARCHAR(6)	
instruction1	Miscellaneous delivery instructions	VARCHAR(255)	
instruction2	Miscellaneous delivery instructions	VARCHAR(255)	
bill_to_company	Bill to company name	VARCHAR(255)	
bill_to_contact	Bill to contact name	VARCHAR(255)	
bill_to_phone	Bill to phone number Example for format: 888-555-4444	VARCHAR(12)	
bill_to_street	Bill to address without instructions	VARCHAR(255)	
bill_to_city	Bill to city	VARCHAR(255)	
bill_to_state	Bill to state	VARCHAR(2)	
bill_to_zip	Bill to zip code. If using Zip+4, Example for format: 33333-2222	VARCHAR(10)	
cust_st	Customer Service time	FLOAT >= 0.00	
email	Email address for the service (delivery) location	VARCHAR(255)	
bill_to_email	Email address for the billing contact	VARCHAR(255)	

## Delivery File Data Fields (mobileiqdeliv.csv)

- The delivery file is set to provide one row of data per product, per customer. A row must be unique based upon the combination of **ID + product code + service code (if used)**.
- Headlight™ accommodates varying types of delivery schedules/calendars. Select the Calendar Type (A or B) for your system. (Calendar dates are black/centered; delivery days are red/upper left-corner. Grayed out boxes are non-delivery days.)

January 2008							February 2008						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
30 <sup>2</sup>	31 <sup>1</sup>	1 <sup>3</sup>	2 <sup>4</sup>	3 <sup>5</sup>	4 <sup>6</sup>	5 <sup>7</sup>						1 <sup>4</sup>	2 <sup>5</sup>
6 <sup>6</sup>	7 <sup>7</sup>	8 <sup>8</sup>	9 <sup>9</sup>	10 <sup>10</sup>	11 <sup>11</sup>	12 <sup>12</sup>	3 <sup>3</sup>	4 <sup>4</sup>	5 <sup>5</sup>	6 <sup>6</sup>	7 <sup>7</sup>	8 <sup>8</sup>	9 <sup>9</sup>
13 <sup>11</sup>	14 <sup>12</sup>	15 <sup>13</sup>	16 <sup>14</sup>	17 <sup>15</sup>	18 <sup>16</sup>	19 <sup>17</sup>	10 <sup>10</sup>	11 <sup>11</sup>	12 <sup>12</sup>	13 <sup>13</sup>	14 <sup>14</sup>	15 <sup>15</sup>	16 <sup>16</sup>
20 <sup>16</sup>	21 <sup>17</sup>	22 <sup>18</sup>	23 <sup>19</sup>	24 <sup>20</sup>	25 <sup>21</sup>	26 <sup>22</sup>	17 <sup>17</sup>	18 <sup>18</sup>	19 <sup>19</sup>	20 <sup>20</sup>	21 <sup>21</sup>	22 <sup>22</sup>	23 <sup>23</sup>
27 <sup>20</sup>	28 <sup>21</sup>	29 <sup>22</sup>	30 <sup>23</sup>	31 <sup>24</sup>			24 <sup>19</sup>	25 <sup>20</sup>	26 <sup>21</sup>	27 <sup>22</sup>	28 <sup>23</sup>	29 <sup>24</sup>	

  

March 2008							April 2008						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 <sup>1</sup>			5 <sup>5</sup>	1 <sup>6</sup>	2 <sup>7</sup>	3 <sup>8</sup>	4 <sup>9</sup>
2 <sup>4</sup>	3 <sup>5</sup>	4 <sup>6</sup>	5 <sup>7</sup>	6 <sup>8</sup>	7 <sup>9</sup>	8 <sup>10</sup>	6 <sup>6</sup>	7 <sup>7</sup>	8 <sup>8</sup>	9 <sup>9</sup>	10 <sup>10</sup>	11 <sup>11</sup>	12 <sup>12</sup>
9 <sup>9</sup>	10 <sup>10</sup>	11 <sup>11</sup>	12 <sup>12</sup>	13 <sup>13</sup>	14 <sup>14</sup>	15 <sup>15</sup>	13 <sup>14</sup>	14 <sup>15</sup>	15 <sup>16</sup>	16 <sup>17</sup>	17 <sup>18</sup>	18 <sup>19</sup>	19 <sup>20</sup>
16 <sup>14</sup>	17 <sup>15</sup>	18 <sup>16</sup>	19 <sup>17</sup>	20 <sup>18</sup>	21 <sup>19</sup>	22 <sup>20</sup>	20 <sup>19</sup>	21 <sup>20</sup>	22 <sup>21</sup>	23 <sup>22</sup>	24 <sup>23</sup>	25 <sup>24</sup>	26 <sup>25</sup>
23 <sup>19</sup>	24 <sup>20</sup>	25 <sup>21</sup>	26 <sup>22</sup>	27 <sup>23</sup>	28 <sup>24</sup>	29 <sup>25</sup>	27 <sup>24</sup>	28 <sup>25</sup>	29 <sup>26</sup>	30 <sup>27</sup>			
30 <sup>24</sup>	31 <sup>25</sup>												

Calendar Type B April 2008							
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 1	7	1	2	3	4	5	6
Week 2	6	7	8	9	10	11	12
Week 3	13	14	15	16	17	18	19
Week 4	20	21	22	23	24	25	26
Week 1	27	28	29	30			

### Delivery File mobileiqdeliv.csv Calendar Type A

Field Name	Field Description	Field Format
id	Customer identifier corresponding to Customer file 'id' field	VARCHAR(20)
productcode	Code identifying the product delivered.	VARCHAR(20)
servicecode	Unique service or contract identifier for each delivered product per account. Some systems do not use a Service Code. If a Service Code is NOT used, Product Codes alone MUST be unique.	VARCHAR(20)
quantity	Number of items delivered per delivery.  Note: Ideally, the quantity will represent an average of the item delivered, by summing more than one prior delivery and averaging.	INT >= 0
price	Contract Price for one item for this id, if available. If no contract price is available, leave blank and standard price (from Product file) will be used.	FLOAT >= 0.00
frequency	This field indicates the periodicity of deliveries: The Week numbers (within a month) that the deliveries are made. If multiple weeks during a month, concatenate the numerals with no spaces or punctuation (i.e. "13" not "1 3")  1 = week 1, 2 = week 2, 3 = week 3, 4 = week 4 13 = weeks 1 & 3 (odd), 24 = weeks 2 & 4 (even) 1234 = weekly	INT >= 0
next_delivery_date	Calendar date of the next scheduled delivery. e.g. '1/1/2005'.  note: Next Delivery Date should be at least one date later (into the future) than the file date.	DATE
location	Unique identifier for starting point of route (i.e. plant, depot, branch)	VARCHAR(8)
route1	Route for Monday	VARCHAR(4)
route2	Route for Tuesday	VARCHAR(4)
route3	Route for Wednesday	VARCHAR(4)
route4	Route for Thursday	VARCHAR(4)
route5	Route for Friday	VARCHAR(4)
route6	Route for Saturday	VARCHAR(4)
route7	Route for Sunday	VARCHAR(4)
day1	Mon = 1, Tue = 2...Sun = 7 Combine if more than once a week e.g. Mon-Wed-Fri = 135, Tue-Thu = 24	INT > 0
day2	Not applicable for Calendar Type B Calendar systems	INT > 0
day3	Not applicable for Calendar Type B Calendar systems	INT > 0
day4	Not applicable for Calendar Type B Calendar systems	INT > 0
sequence1	Sequence for Monday	INT 0-9999
sequence2	Sequence for Tuesday	INT 0-9999
sequence3	Sequence for Wednesday	INT 0-9999
sequence4	Sequence for Thursday	INT 0-9999

Field Name	Field Description	Field Format
sequence5	Sequence for Friday	INT 0-9999
sequence6	Sequence for Saturday	INT 0-9999
sequence7	Sequence for Sunday	INT 0-9999
deliv_st	Product Delivery Service Time. If supplied, this value represents the Service Time, in minutes, for the specific customer's delivery of a specific product. Service Times provided here (for multiple products) will be added together.	FLOAT >= 0.00

### Delivery File mobileiqdeliv.csv Calendar Type B

Field Name	Field Description	Field Format
id	Customer identifier corresponding to Customer file 'id' field	VARCHAR(20)
productcode	Code identifying the product delivered.	VARCHAR(20)
servicecode	Unique service or contract identifier for each delivered product per account. Some systems do not use a Service Code. If a Service Code is NOT used, Product Codes alone MUST be unique.	VARCHAR(20)
quantity	Number of items delivered per delivery.  Note: Ideally, the quantity will represent an average of the item delivered, by summing more than one prior delivery and averaging.	INT >= 0
price	Contract Price for one item for this id, if available. If no contract price is available, leave blank and standard price (from Product file) will be used.	FLOAT >= 0.00
frequency	This field indicates the periodicity of deliveries: The Week numbers (within a month) that the deliveries are made. If multiple weeks during a month, concatenate the numerals with no spaces or punctuation (i.e. "13" not "1 3")  1 = week 1, 2 = week 2, 3 = week 3, 4 = week 4 13 = weeks 1 & 3 (odd), 24 = weeks 2 & 4 (even) 1234 = weekly	INT >= 0
next_delivery_date	Calendar date of the next scheduled delivery. e.g. '1/1/2005'.  note: Next Delivery Date should be at least one date later (into the future) than the file date.	DATE
location	Unique identifier for starting point of route (i.e. plant, depot, branch)	VARCHAR(8)
route1	Route for Monday	VARCHAR(4)
route2	Route for Tuesday	VARCHAR(4)
route3	Route for Wednesday	VARCHAR(4)
route4	Route for Thursday	VARCHAR(4)
route5	Route for Friday	VARCHAR(4)
route6	Route for Saturday	VARCHAR(4)
route7	Route for Sunday	VARCHAR(4)
day1	Mon = 1, Tue = 2...Sun = 7 Combine if more than once a week e.g. Mon-Wed-Fri = 135, Tue-Thu = 24	INT > 0
day2	Not applicable for Calendar Type B Calendar systems	INT > 0
day3	Not applicable for Calendar Type B Calendar systems	INT > 0
day4	Not applicable for Calendar Type B Calendar systems	INT > 0
sequence1	Sequence for Monday	INT 0-9999
sequence2	Sequence for Tuesday	INT 0-9999
sequence3	Sequence for Wednesday	INT 0-9999
sequence4	Sequence for Thursday	INT 0-9999

Field Name	Field Description	Field Format
sequence5	Sequence for Friday	INT 0-9999
sequence6	Sequence for Saturday	INT 0-9999
sequence7	Sequence for Sunday	INT 0-9999
deliv_st	Product Delivery Service Time. If supplied, this value represents the Service Time, in minutes, for the specific customer's delivery of a specific product. Service Times provided here (for multiple products) will be added together.	FLOAT >= 0.00

## Product File Data Fields (mobileiqprod.csv)

The MobileIQProd.csv file provides an SKU reference lookup for all products available for delivery and allows grouping by Product Category. Due to its relatively static nature, we recommend that mobileiqprod.csv be created and saved on a one-time basis rather than generated dynamically every day.

### Product File mobileiqprod.csv

Field Name	Field Description	Field Format																														
productcode	Unique code identifying the product.	VARCHAR(20)																														
description	Text description of product.	VARCHAR(255)																														
weight	Weight of product per piece	FLOAT >= 0.0																														
productcategory	<p>Nine (9) product categories are used, with Headlight reserving a tenth product category for totals. The Product Categories are designed to provide additional (summarized) data when reviewing, evaluating, and/or making routing changes. Clients will have an opportunity to customize their product category labels within Headlight (or simply load all of their products into a single category).</p> <p>Note: The below are sample/common industry categories. Client has the capability to rename/re-configure product categories as fits their needs within HeadlightTM.</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Commercial Laundry</th> <th>Water Delivery</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Uniforms</td> <td>Salt</td> </tr> <tr> <td>B</td> <td>Mats</td> <td>Water</td> </tr> <tr> <td>C</td> <td>Continuous Roll Towel, Shop Towels</td> <td>Chemicals</td> </tr> <tr> <td>D</td> <td>Linens</td> <td>Potable Exchange</td> </tr> <tr> <td>E</td> <td>Mops</td> <td>Filter</td> </tr> <tr> <td>F</td> <td>Bathroom &amp; restroom supplies</td> <td>Coffee &amp; Beverage</td> </tr> <tr> <td>G</td> <td>NOG</td> <td>DI Regeneration</td> </tr> <tr> <td>H</td> <td>Other</td> <td>Other</td> </tr> <tr> <td>I</td> <td>Custom product(s)</td> <td>Custom Product(s)</td> </tr> </tbody> </table>	Category	Commercial Laundry	Water Delivery	A	Uniforms	Salt	B	Mats	Water	C	Continuous Roll Towel, Shop Towels	Chemicals	D	Linens	Potable Exchange	E	Mops	Filter	F	Bathroom & restroom supplies	Coffee & Beverage	G	NOG	DI Regeneration	H	Other	Other	I	Custom product(s)	Custom Product(s)	CHAR(1)
Category	Commercial Laundry	Water Delivery																														
A	Uniforms	Salt																														
B	Mats	Water																														
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E	Mops	Filter																														
F	Bathroom & restroom supplies	Coffee & Beverage																														
G	NOG	DI Regeneration																														
H	Other	Other																														
I	Custom product(s)	Custom Product(s)																														
price	List (standard) price per unit in dollars (Currency >= 0.00) If specific prices per customer are NOT provided in the mobileiqdeliv.csv file, then this general price can be used for the item.	FLOAT >= 0.00																														
valid	Boolean true/false. TRUE for valid, delivered products. FALSE is used for non-delivery items (such as adjustments, install items) and/or obsolete Product Codes.	VARCHAR(5)																														

Field Name	Field Description	Field Format																		
normalized	<p>Factor to normalize product to a standard delivery unit. Float &gt; 0.0. Product Volume is normalized to a customer selected item (or volume).</p> <p><b>Example 1: A Commercial Laundry normalized to a 4 x 6 Mat</b></p> <table border="0"> <tr> <td>PRODUCT</td> <td>NORMALIZED VALUE</td> </tr> <tr> <td>4x6 mat</td> <td>1.0</td> </tr> <tr> <td>4x8 mat</td> <td>1.33</td> </tr> <tr> <td>2x3 mat</td> <td>0.25</td> </tr> </table> <p><b>Example 2: Water delivery normalized to a 5 gallon bottle of water</b></p> <table border="0"> <tr> <td>PRODUCT</td> <td>NORMALIZED VALUE</td> </tr> <tr> <td>5 gal water</td> <td>1.0</td> </tr> <tr> <td>50 lb salt</td> <td>1.0</td> </tr> <tr> <td>80 lb salt</td> <td>1.6</td> </tr> <tr> <td>PE tank</td> <td>3.0</td> </tr> </table> <p>Note: If Normalization factors are not available, all Product Codes should be coded as 1.0 (Normal).</p>	PRODUCT	NORMALIZED VALUE	4x6 mat	1.0	4x8 mat	1.33	2x3 mat	0.25	PRODUCT	NORMALIZED VALUE	5 gal water	1.0	50 lb salt	1.0	80 lb salt	1.6	PE tank	3.0	FLOAT >= 0.0
PRODUCT	NORMALIZED VALUE																			
4x6 mat	1.0																			
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PRODUCT	NORMALIZED VALUE																			
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50 lb salt	1.0																			
80 lb salt	1.6																			
PE tank	3.0																			
prod_st	<p>Product Code Service Time. If supplied, this value represents the Service Time, in minutes, for one unit (item) of the specified product. This value will be used as a multiplier (against the quantity in the mobileiqdeliv.csv file) to calculate Service Times</p>	FLOAT >= 0.00																		