

# Alternative Method for Download Reports

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I just completed a large NPR Report that “downloads” over 2000 pieces of patient data to a “flat file”. This file is then uploaded into a vendor’s system that analyzes this data for state reporting. Obviously, creating and adding 2000+ fields to the NPR Report Writer’s picture is not practical (perhaps not even possible?). It would take “forever” to make that many computed fields, add them to the picture, and type that many “New Line” line attributes. Even worse, what if you discovered a mistake or need to add another field in the middle of the report later. This would be a nightmare!

This article will teach you an alternate method for developing “download” reports that are quick to build, easy modify, and can use thousands of fields.

## Types of Flat Files

### **Fixed Length**

In a fixed length file, each piece of data is placed in a specific position; these positions will be defined in a specification.

#### *Example Specification for a Fixed Length File*

Field Start	Field End	Length	Format	Field
1	20	20	Alpha	Fist Name
21	41	20	Alpha	Last Name
42	50	8	MM/DD/YY	Birth Date
51	4	3	Numeric	Age in Years

#### *Example Output- Fixed Length*

Marvin	Johnson	07/03/7237
John	Smith	04/21/5059

### **Variable Length**

Variable length files separate data using a delimiter. The most common delimiters used are the pipe (|), semicolon (;), and comma (,).

#### *Example Output - Pipe Delimited*

Marvin Johnson 07/03/72 37
John Smith 04/21/50 59

## **Magic Syntax for Download Reports**

You will need to understand some basic Magic syntax before you can create download reports.

<b>Syntax</b>	<b>Meaning</b>	<b>Notes</b>
^   Caret	Send value to file	Appears as right arrow → in Meditech
!   Exclamation	Prefix open to file	
_   Underscore	Concatenate values together	
:nTL	Fixed length field, Left Justify	
:nTR	Fixed length field, Right Justify	

### *Examples*

<b>Syntax</b>	<b>Meaning</b>
@name^!	Send patient's name to file
@name:30TL^!	Send patient's name with fixed length 30, Left Justify
@name_” ^!	Send patient's name delimited with pipe
@city_”,”_@state_” ^!	Send patient's city/state delimited with pipe
@name#”0,”:20TL^!	Send patient's first name with fixed length 20, Left Justify

## Creating A Download Report

### Step 1 – Define Page Characteristics

After you create a new report, change the default settings to:

- **Lines/Page = 66** (not necessary for C/S)
- **Page Banner = NONE**
- **Report Header = Y** (only if you need column headers)

#### *Magic - Example with Report Header*

Chars/Line	92	Lines/Page	66	Page Size	66	Left Margin	0
Chars/Inch	12	Lines/Inch	6				
Page Banner	NONE	Report Header	y	Detail	y	Compiled File	
Page Header	N	Report Trailer	n				
Page Trailer	N						

#### *C/S - Example with Report Header*

Chars/Line	92	Lines/Page	66	Page Size	66	Left Margin	0
Chars/Inch	12	Lines/Inch	6				
Page Banner	NONE	Report Header	Y	Detail	Y		
Page Header	N	Report Trailer	N				
Page Trailer	N						

### Step 2 – Edit Footnotes

*Note:* If you did not include Report Header, do not include the “AL HR hr” footnote.

#### MAGIC

Edit Footnotes

SFF NO

EFF NO

AL HR hr

AL D d

#### C/S

Use same footnotes as MAGIC, but also add:

**PFF NO**

### Step 3 – Create Macro To Defined Column Headers

**Note:** Skip this step if you do not have a Report Header.

Create a macro called “hr” with code similar to below.

#### *Fixed length example:*

```
“First Name”:20TL^!,  
“Last Name”:20TL^!,  
“Birthdate”:8TL^!,  
“Age”:3TL^!
```

#### *Variable length example:*

```
“|^D,  
“First Name”_D^!,  
“Last Name”_D^!,  
“Birthdate”_D^!,  
“Age”^!
```

Notice that we assigned the pipe delimiter to a variable called “D” on the first line. This allows us to quickly change the delimiter at any time. Also, notice we did not place a delimiter after the last column header.

### Step 4 – Create a macro called “d”

Add code to your macro to send each field’s data.

#### *Fixed length example:*

```
@name#”0,”:20TL^!,  
@name#”1,”#”0 “:20TL^!,  
%Z.date.out(@birthdate)^DOB,  
DOB:8TL^!,  
%Z.age.in.years(@birthdate,@.today)^AGE,  
AGE:3TL^!
```

#### *Variable length example:*

```
“|^!,  
@name#”0,”_D^!,  
@name#”1,”#”0 “_D^!,  
%Z.date.out(@birthdate)^DOB,  
DOB_D^!,  
%Z.age.in.years(@birthdate,@.today)^!
```

### Step 5 – Translate the Report

Make sure you translate the report before you run it.