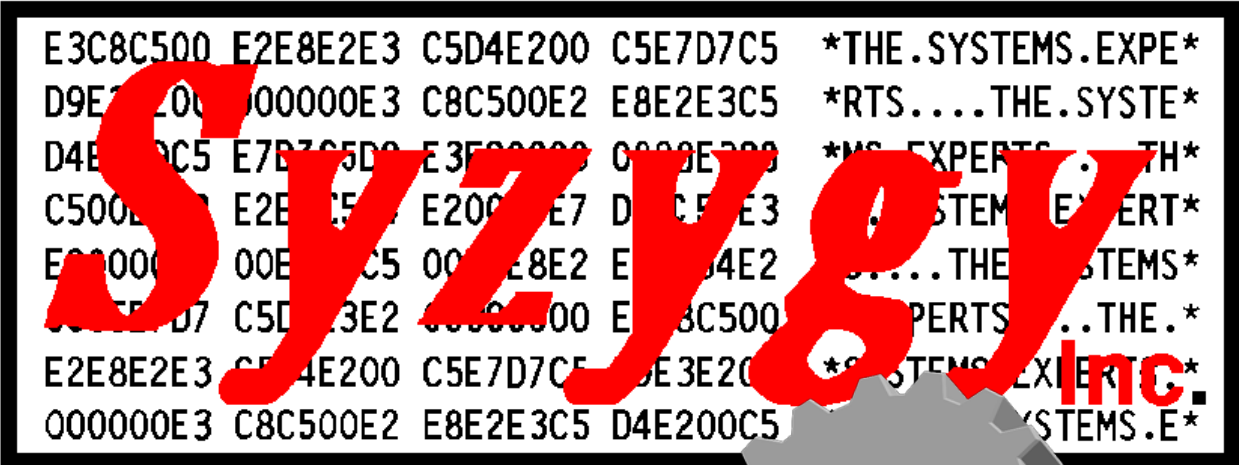


[Version 5]  
November 23, 2011

## SyzTXT/z



# [Installation and User's Guide]

Short subject text, wireless message or email utility

## Revision History

Version	Date	Revision Description
5.0	5/23/2011	<ul style="list-style-type: none"><li>Remove requirement for //SMTP or //SMTPMAIL dd's. Sites may still use the real JCL if they wish, but it is no longer necessary, it defaults to (B,SMTP). If the site does not call their SMTP by the name "SMTP" then they will need to include the "real" JCL in their SyzTXT proc.</li><li>Support for ATT phone email test messaging.</li></ul>

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# 1. Introduction

SyzTXT/z is a utility that works with the Syzygy Automation suite of products. This utility makes it very easy to send short text messages via SMTP to any email address, pager, or cellphone, if the cell carrier supports text messaging via the standard EMAIL RFC. The Syzygy Automation Suite provides z/OS sites with a complete and comprehensive capability to automate the entire processor complex. The Suite is made up of 4 main products and one new addition as of 2012;

SyzAUTO/z, the command and task scheduling facility, which allows the site to schedule any system or subsystem command, submit batch JOBS and control timed operations on a 24x7 basis.

SyzCMD/z, the Command Scripting facility, which allows the site to start automated scripts to perform automated and complex functions with complete nested IF/THEN/ELSE logic, allowing the site to control all simple and complex operations in an orderly and efficient manner.

SyzSPOOL/z, the JES SPOOL maintenance facility, which offloads spool data from JES2 or JES3 to separately addressable data sets, and allows users to access the offloaded output interactively from TSO/ISPF or via the Web from any standard web browser. Full security is maintained for access to the offloaded spool data, which is able to be controlled via any storage manager (HSM, ABR), or via SyzSPOOL's own internal dataset allocation control methods. The Data may be viewed, sent via FTP or via Email in any of several output formats including PDF, WORD, HTML, XML and several others.

SyzMPF/z, the Console Message Processing Facility, allows the site to respond to any Console-type message with predefined scripts allowing complete interactive control of any console situation or message. SyzMPF/z allows answering any request or

responding to any console based event, (job end, start, abend, message from any job or task, etc.). In short, any console event or message can be handled by the facilities of SyzMPF/z.

SyzNotify/z, the end of task notification facility. SyzNotify/z captures the maximum condition code, plus all (or any) of the Step condition codes, plus other task related information (execution time, CPU time used, I/O's etc.) and sends them to any Email address or destination. User's no longer have to logon to the system to see if a task completed and what it's condition codes were, they can be notified via email, which can be encrypted and delivered directly from the mainframe.

## Purpose

The products that make up the Syzygy Automation Suite, are designed to offload the burden of supporting the normal day to day operation of the computer center. The facilities allow the site to spend their time and money on things that really matter, instead of maintaining the same old processes which can be automated by the components of the Automation Suite. The site will conserve manpower, and resources.

## Related Documents

SyzAUTO/z Installation and Operations Guide  
SyzCMD/z Installation and Operations Guide (this guide)  
SyzSPOOL/z Installation and Operations Guide  
SyzMPF/z Installation and Operations Guide  
SyzNotify/z Installation and Operations Guide

## Conventions

Where present, z/OS, OS/390 and MVS may be used interchangeably. It is not meant that these products are exactly the same, but they are sufficiently alike that for the purposes of this manual, they can be thought of as the same family with similar or identical support constraints with respect to the products covered in this manual.

## Problem Reporting Instructions

Problems should be reported to:

[ClientSupport@SyzygyInc.com](mailto:ClientSupport@SyzygyInc.com)

Problems with Beta versions of this product should be reported to:

[Beta@SyzygyInc.com](mailto:Beta@SyzygyInc.com)

## 2. Overview

This program is a utility provided as part of the Syzygy Automation Suite of products, which can be used to send short text messages electronically as E-Mail via SMTP to any individual or number of individuals desired.

The SyzTXT/z program interfaces with the sites SMTP server under z/OS, and can (if the site allows) send text directly to any user in the sites local network, or to any user with an email address, (if the site allows the transmission). The utility can send the text to a cellphone if the cellphone carrier supports the option. Currently AT&T, Verizon, and Sprint all support this feature. Other carriers also support it, but you will need to verify that your carrier supports the features of email/text message if they are not one of those previously mentioned.

The SyzTXT/z program will send the EMAIL message to all users that have been identified to receive the email. There is no limit to the number of users that can be notified from a single execution of SyzTXT/z.

### Functional Description

SyzTXT/z is meant to be run as a separate Started Task. It is possible to run as a step of a "normal" JOB or as a called program from other programs (i.e. from within a COBOL program), but the main intention of SyzTXT/z is to run as a separate task or step. SyzTXT/z is composed of several 24bit, 31bit and 64bit subroutines (CSECTS) generated into a single load module, which must be executed from a load library.

## 3. Installation instructions

### Procedures

#### STEP 1:

The software you have ordered is attached to this E-Mail communication as a .ZIP file. You should save or copy this file to a suitable directory on your PC. The ZIP file will contain 1 load module library, and 1 sample/installation data sets that can be used by the site to help with the setup of the utility.

The sample/installation data set contains sample SyzTXT/z procedure members to use the utility including JCL in member "SYZTXT".

#### STEP 2:

Use PKZIP or some other ZIP/UNZIP program to unzip the file to the same directory. You will thereby obtain 2 EBCDIC format files with the following name structure:

Software.datasettype.XML where "software" is the name of the name of the Licensed Software Product that you have ordered and "datasettype" is either LOAD, or SAMPLIB.



### STEP 3:

PRE-ALLOCATE THE TWO RECEIVING XMIT FILES ON YOUR MAINFRAME

Pre-allocate a file on MVS (e.g. 'userid.software.datasettype.xmit') with the following DCB (use the same attributes for both files).

Space: 1 Cylinder  
Organization : PS  
Record format : FB  
Record length : 80  
Block size : 3120

### STEP 4:

UPLOAD THE software.datasettype.XMI FILES FROM YOUR PC TO YOUR MAINFRAME.

Using FTP or the file transfer component of your TCP/IP telnet emulator, specifying BINARY transfer, upload the "software.datasettype.XMI" files to your mainframe. You should pre-allocate the destination dataset as outlined in STEP 3 because some mainframe site configurations do not automatically allocate the proper format container for the uploaded XMIT file.

BE SURE TO USE BINARY FILE TRANSFER, DO NOT USE ASCII TRANSLATION.

## STEP 5:

### RECEIVE THE XMIT FILE TO CREATE THE LOAD MODULE PDS

On your MAINFRAME perform a RECEIVE command on the uploaded XMIT load module file from step 4 as follows:

(\*note If operating under ISPF use panel option 6, or exit ISPF to TSO READY state. )

```
RECEIVE INDATASET('userid.software.load.xmit')
```

\*\*\*where 'userid.software.load.xmit' is the pre-allocated file in STEP 3.

After doing the above command you will be prompted with something similar to the following:

```
INMR901I Dataset DATA.SET.NAME from userid on ??????????  
INMR906A Enter restore parameters or 'DELETE' or 'END' +
```

at this prompt you should enter:

```
DA('userid.software.loadlib')
```

... where "userid.software.loadlib" will be a new load module PDS that you have selected which will contain all of the modules required for the correct operation of the licensed software that you have ordered. Do not pre-allocate this dataset.

PLEASE BE SURE TO CHOOSE A NAME THAT DOES NOT ALREADY EXIST AND WHICH WILL BE RACF ACCESSABLE BY YOU. We suggest that you use your TSO userid as the HLQ (High Level Qualifier) to assure RACF permission.



\*Note: Some mainframe sites will default to a PUBLIC volume if DF/SMS is not set up properly. If your site falls into this category, you might want to use the following format of the response to keep your dataset from being allocated to your WORK volumes and being scratched before you are ready:

```
DA('userid.software.loadlib') VOL(volser) UNIT(unitname)
```

\*\*\* where "volser" is a DASD volume at your site (e.g. TSO001) and "unitname" is the esoteric unitname which governs that volser (e.g. SYSALLDA or 3390).

## STEP6:

\*\*\*REPLACE THE 30-DAY VERSION OF YOUR LICENSED SOFTWARE

You must copy the load module(s) shipped and received by you in the previous steps to the library that currently contains your 30-day trial version of the licensed software. You do not have to use the same library, but you will need to delete the old 30-day trial version of the software if you do not use the same library or else the software will cease to function when the 30-day trial period ends. In some cases the load module(s) shipped will need to be placed into an "APF AUTHORIZED" library. If APF authorization is required it will be noted in the identification section(s) above. Normally it is always safe to copy the load module(s) to the same library as your 30-day trial versions so that no system or user JCL members will need to be updated.

## STEP7 (optional):

optionally, repeat steps 3 through 5 above for the SAMPLIB.XMIT files that were included within your ZIP file.

## Sample JCL and Possible RACF Changes.

To utilize SyzTXT/z to its full potential the user must provide a started task procedure in (normally) SYS1.PROCLIB or a library concatenated to it which is available to be used during the life of normal execution. The started task, should be defined to RACF so that it can be used to issue SMTP text. The task will need to have read access to the dataset used to hold the EMAIL address profiles (defined with the //TO DD described later).

## SyzTXT Parameters

There are now only 1 “required” execution parameter, being the MESSAGE that you wish to send to the defined user(s). Some of the parameters can be “pre-set” by zapping the SyzTXT module via supplied AMASPZAP control cards. The Zaps can make it easier for some sites to utilize the SyzTXT program.

### **SUBJ parameter**

#### *Usage*

SUBJ=(anything you wish to say)

This is the only require parameter, it is limited by the maximum allows parmlength (100 bytes) of a execution parameter. When used with automatic message processing, as in our example, it is limited to 90 bytes, divided into two sub-parameters, MSG1, and MSG1, although you can use any names you are comfortable to use. It is required however that you use the SUBJ=(.....) format of this parameter.

## Available Program "ZAPs"

This is the JES node which the job is executed on, and it's used to identify the output to SMTP when the email is generated within the HELO message. In most cases, SMTP doesn't really care what the node name is, but for some sites, it's a requirement that the node name be valid. The default within the product is "UNKNOWN".

### *Zap Parm*s

```

NAME SYZTXT SYZTXT
VER E58 E4D5D2D5,D6E6D540      verify "UNKNOWN "
REP E58 XXXXXXXXX,XXXXXXXXXX    replace with your node name pad
                                with X'40' (blanks) to 8 characters total.

```

### **FROM parameter**

This is the VALID email address that you wish to use to appear to send the condition code email from. Some sites require a specific name to send email from the mainframe, such as the nodename or system ID of the system followed by the valid URL of the network you are part of. For us at Syzygy, we use "Notify@SyzygyInc.com", but only because we think it looks nice, not because of any special requirement. The default within the program is "SYZTXT@UPMC.edu", and is not normally valid for most sites, but if it works for you, then keep it.

### *Zap Parm*s

```

NAME SYZTXT SYZTXT
VER 0996 4CE2A8A9, E3E7E37C      verify <SyzTXT@
VER 099E E4D7CD4C3,4B8584A4      verify UPMC.edu
VER 09A6 6E404040,40404040      verify > and 7 blanks
VER 09AE 40404040,40404040      Verify 8 more blanks
VER 09B6 40404040,40404040      "
VER 09BE 40404040,40404040      "
VER 09C6 40404040,40404040      "
VER 09CE 40404040                Verify last 4 blanks

REP 0996 4CXXXXXXXX,XXXXXXXXXX    replace with "<" and your desired
                                EMAIL ID up to 50 characters, you must
                                follow the ID with a greater than sign ">"
                                to denote the end of the email address.

```

\*Note: the ZAP requires a ">" to immediately follow the email address.

## DD requirements

### TO DD

This DD statement is used to identify what Email Id or Ids , phone numbers, or SMS addresses are to be sent text message. This DD card is required. Without it, how would we know who to send the message to? The DD may be specified as inline “DD \*” or a sequential data set or a member of a PDS. The cards that make up this file can only specify ONE Email address per line, but you can have any number of lines in the file. The Email address(es) must begin in column 1 of the card. The DCB of the data set must be LRECL(80) and may have any valid BLOCKSIZE. An “\*” in column 1 denotes a comment and can be used for your informational purposes within the data set, they will be skipped by the SyzTXT program.

#### *Example 1*

This will send the condition codes to 3 separate people using “DD \*” format.

```
..... all the other steps of the JOB go here
/*
//EMAIL      EXEC PGM=SYZTXT,
// PARM='SUBJ=(any text message up to 90 bytes)'
//TO  DD    *
* comment card
Brian_Westerman@SyzygyInc.com
* another comment card
Pepper_Kosch@SyzygyInc.com
* comment
Fred@Flintstone.net
/*
```

*Example 2*

This will send the text message 3 separate people using a TO PDS member  
..... all the other steps of the JOB go here

```
//*  
//EMAIL      EXEC PGM=SYZTXT,  
// PARM='SUBJ=(any text message up to 90 bytes)'  
//TO  DD     DISP=SHR,DSN=NOTIFY.PDS(THISJOB)
```

contents of the PDS member (THISJOB)

```
* comment card  
  Brian_Westerman@SyzygyInc.com  
* another comment card  
  Pepper_Kosch@SyzygyInc.com  
* comment  
  Fred@Flintstone.net
```

## Sample SyzTXT/z Output

### Sample STARTED TASK

(USER.PROCLIB(SYZTXT))

```
//SYZTEXT PROC MSG1=,MSG2=,TO=  
//*  
//* SEND TEXT  
//*  
//SYSMSG EXEC PGM=SYZTXT,PARM='SUBJ=(&MSG1 &MSG2)'  
//TO DD DSN=SYZYG.Y.NOTIFY(&TO),DISP=SHR
```

### Sample console startup command

```
S SYZTXT,TO=BRIAN,MSG1='This is a test message'
```

### Sample Email Output

Message formatted: THURSDAY FEBRUARY 23, 2011 at: 15:42:31 ...

THIS IS A TEST MESSAGE

...End of Message. 00-0000S Syzygy Inc. Main Site



## Available Cellular gateways

Most carriers have “SMS gateways” which take email messages from the Internet and deliver them to their customers’ cell phones as SMS text messages. The trick is that you need to know what carrier the recipient’s phone is on — it’s not enough to know their phone number. That’s because the carrier determines what the email address of the receiving phone is going to be. For example, Cingular phones’ address are all “something@cingularme.com” while Verizon phones are “something@vtext.com.”

Sound complicated? It’s not. All you really need to do is find your carrier in the list below, and then use the pattern shown there to figure out your email address. If you want to send email to another persons’ phone, just ask them which carrier they use, and off you go!

For the major carriers, we have included a link to a page with more detailed information on how SMS works with that carrier, how much it costs, and where you can find more information. In the list below, just click any carrier’s highlighted name to find out more.

### Alltel

[10-digit phone number]@message.alltel.com

Example: 1234567890@message.alltel.com

### AT&T (formerly Cingular)

[10-digit phone number]@txt.att.net

Example: 1234567890@txt.att.net

For multimedia messages, use [10-digit-number]@mms.att.net

Example: 1234567890@mms.att.net

### Boost Mobile

[10-digit phone number]@myboostmobile.com

Example: 1234567890@myboostmobile.com

### Cricket Wireless

[10-digit phone number]@sms.mycricket.com

Example: 1234567890@sms.mycricket.com

For multimedia messages: [10-digit phone number]@mms.mycricket.com

Example: 1234567890@mms.mycricket.com

**Nextel** (now part of Sprint Nextel)

[10-digit telephone number]@messaging.nextel.com

Example: 1234567890@messaging.nextel.com

**Sprint** (now Sprint Nextel)

[10-digit phone number]@messaging.sprintpcs.com

Example: 1234567890@messaging.sprintpcs.com

**T-Mobile**

[10-digit phone number]@tmomail.net

Example: 1234567890@tmomail.net

**Verizon**

[10-digit phone number]@vtext.com

Example: 1234567890@vtext.com

**Virgin Mobile USA**

[10-digit phone number]@vmobl.com

Example: 1234567890@vmobl.com

**Other U.S. and Canadian carriers:**

Bell Canada: [10-digit-phone-number]@txt.bellmobility.ca

Centennial Wireless: [10-digit-phone-number]@cwemail.com

Cellular South: [10-digit-phone-number]@csouth1.com

Cincinnati Bell: [10-digit-phone-number]@gocbw.com

Metro PCS: [10-digit-phone-number]@mymetropcs.com or [10-digit-phone-number]@metropcs.sms.us

Qwest: [10-digit-phone-number]@qwestmp.com

Rogers: [10-digit-phone-number]@pcs.rogers.com

Suncom: [10-digit-phone-number]@tms.suncom.com

Telus: [10-digit-phone-number]@msg.telus.com

U.S. Cellular: [10-digit-phone-number]@email.uscc.net

## Cross references to other products

SyzTXT/z can operate in conjunction with the SyzMPF/z, SyzSPOOL/z and SyzCMD/z products. SyzMPF/z and SyzCMD/z can “Script” any series of commands and provide interactive feedback to the script logic so that intelligent choices can be made “on the fly”. SyzSPOOL/z is the automated spool management product.