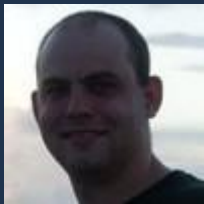




# AtoZ

A solution for AD to Zabbix user synchronization

Who am I?



## Steven Bush

- Manager, Performance Enablement Team, SAS IT
- 17+ years IT/software development experience
- 4+ years Zabbix experience
- Zabbix Certified Professional and Certified Specialist

## What I'm here to discuss

- What does AtoZ do?
- How to setup AtoZ?
- Questions?



# What does AtoZ do?

Programmatically syncing target user groups to Zabbix

# AtoZ

## Programmatically syncing target user groups to Zabbix

## Syncing AD groups and membership

- Create user groups found in AD that match given pattern
- Remove user groups missing from AD that match pattern
- Create users found in AD groups
- Create/update user media
- Assign role to users based on group membership
- Remove users from groups synced from AD
- Delete users with no remaining user groups
- Send stats into Zabbix via zabbix\_sender

AtoZ (13 Items)				
<input type="checkbox"/>	Number of groups created	10/09/2019 08:54:08 AM	0	<a href="#">Graph</a>
<input type="checkbox"/>	Number of groups deleted	10/09/2019 08:54:08 AM	0	-1 <a href="#">Graph</a>
<input type="checkbox"/>	Number of groups processed	10/09/2019 08:54:08 AM	1732	<a href="#">Graph</a>
<input type="checkbox"/>	Number of users created	10/09/2019 08:54:08 AM	0	<a href="#">Graph</a>
<input type="checkbox"/>	Number of users deleted	10/09/2019 08:54:08 AM	0	<a href="#">Graph</a>
<input type="checkbox"/>	Number of users modified	10/09/2019 08:54:08 AM	3	<a href="#">Graph</a>
<input type="checkbox"/>	Number of users processed	10/09/2019 08:54:08 AM	1408	<a href="#">Graph</a>
<input type="checkbox"/>	Synchronization pipeline processing time	10/09/2019 08:54:08 AM	3s 993.1ms	-170ms <a href="#">Graph</a>
<input type="checkbox"/>	Execution results from atoZ.log	10/09/2019 08:53:09 AM	20191009:084908 atoZ.sync INFO tot...	<a href="#">History</a>
<input type="checkbox"/>	Zabbix group deletions	10/09/2019 08:53:09 AM	20191009:084908 atoZ.zabbix INFO ...	<a href="#">History</a>
<input type="checkbox"/>	Log file modification time	10/09/2019 08:52:08 AM	10/09/2019 08:49:08 AM	+00:05:00 <a href="#">Graph</a>
<input type="checkbox"/>	Zabbix user deletions	10/09/2019 03:38:09 AM	20191009:033410 atoZ.zabbix INFO ...	<a href="#">History</a>
<input type="checkbox"/>	Zabbix user modifications	10/08/2019 02:43:07 PM	20191008:143908 atoZ.zabbix INFO ...	<a href="#">History</a>



# How to setup AtoZ?

The scripts and configuration files

# AtoZ

The scripts and configuration files

## Touch Points

- atoz\_wrapper.sh
  - Update install path
  - Zabbix Server
  - Hostname

```
#!/bin/sh

ATOZ_DIR=/home/zabbix/atoz
ATOZ_EXE=${ATOZ_DIR}/bin/atoz
ATOZ_CFG=${ATOZ_DIR}/atoz.cfg
ATOZ_LOGGING_CONF=${ATOZ_DIR}/logging.conf

ZABBIX_SENDER=/usr/bin/zabbix_sender
ZABBIX_SERVER=sas.com
ZABBIX_HOSTNAME=sas.com

${ATOZ_EXE} -f ${ATOZ_CFG} -l ${ATOZ_LOGGING_CONF} | \
awk '
    BEGIN {
        error = 0
    }

    / group summary: / {
        print "- atoz.groups_processed", $6;
        print "- atoz.groups_created", $8;
        print "- atoz.groups_deleted", $10;
    }

    / user summary: / {
        print "- atoz.users_processed", $6;
        print "- atoz.users_created", $8;
        print "- atoz.users_deleted", $10;
        print "- atoz.users_modified", $12;
    }

    / total synchronization took / {
        print "- atoz.synchro_time", $7;
    }
}' | ${ZABBIX_SENDER} -z ${ZABBIX_SERVER} -s ${ZABBIX_HOSTNAME} -i -
```

## The scripts and configuration files

## Touch Points

- atoz.cfg
  - Update AD parameters
  - Zabbix API location and credentials
  - Add user group name patterns
  - Add any exclude users

```
[general]
media=mail_media,mobile_media

[mail_media]
mediatype=Email
field=MAIL

[mobile_media]
mediatype=SMS
field=mobile

[ad]
url=ldap://server:1234
username=userid
password=password
basedn=DC=something,DC=SAS,DC=com

[zabbix]
url=https://zabbix.sas.com/zabbix/api_jsonrpc.php
username=zabbix_api_user
password=password

[usergroups]
pattern1=Division: IT
pattern2=Hosting Development

[devgroups]
pattern1=IT Leadership
pattern2=IT Leads
pattern3=Web Masters
exclude1=admin
exclude2=app
exclude3=data
exclude4=webowner

[admingroups]
pattern1=Zabbix Admin Group
```



## The scripts and configuration files

## Touch Points

- logging.cfg
  - Set path
  - Set logging level

```
[[loggers]]
keys=root

[handlers]
keys=consoleHandler,logFileHandler

[formatters]
keys=simpleFormatter

[logger_root]
handlers=consoleHandler,logFileHandler
level=NOTSET

[handler_consoleHandler]
level=INFO
class=StreamHandler
formatter=simpleFormatter
args=(sys.stdout,)

[handler_logFileHandler]
level=INFO
class=FileHandler
formatter=simpleFormatter
args=('/home/zabbix/atoz/atoz.log',)

[formatter_simpleFormatter]
format=%(asctime)s %(name)-12s %(levelname)-5s %(message)s
datefmt=%Y%m%d:%H%M%S
```

AtoZ

The scripts and  
configuration files

## Touch Points

- Setup cron entry for `atoz_wrapper.sh`



THANK YOU!