

# README

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## 1 toddwint/ztp

### 1.1 Info

ZTP (Zero-Touch Provisioning) docker image for Juniper SRX345, SRX1500, ACX7024, EX2300, EX4100, and HPE Aruba 2930F devices.

Docker Hub: <https://hub.docker.com/r/toddwint/ztp>

GitHub: <https://github.com/toddwint/ztp>

*For more detailed information, please view the ZTP Instructions files: `ZTP Instructions.md`, `ZTP Instructions.html`, or `ZTP Instructions.pdf`.*

### 1.2 Overview

- Performs Zero-Touch Provisioning of
  - Juniper SRX345
  - Juniper SRX1500
  - Juniper ACX7024
  - Juniper EX2300
  - Juniper EX4100
  - HPE Aruba 2930F

### 1.3 Features

- Ubuntu base image
- Plus:
  - rsyslog
  - isc-dhcp-server
  - ftp
  - vsftpd
  - tftp-hpa
  - tftpd-hpa
  - webfs
  - bsdmaintils
  - fzf

- tmux
- python3-minimal
- iproute2
- tzdata
- [ttyd](#)
  - ◊ View the terminal in your browser
- [frontail](#)
  - ◊ View logs in your browser
  - ◊ Mark/Highlight logs
  - ◊ Pause logs
  - ◊ Filter logs
- [tailon](#)
  - ◊ View multiple logs and files in your browser
  - ◊ User selectable **tail**, **grep**, **sed**, and **awk** commands
  - ◊ Filter logs and files
  - ◊ Download logs to your computer

## 1.4 Sample config.txt file

```
# To get a list of timezones view the files in `/usr/share/zoneinfo`
TZ=UTC

# The interface on which to set the IP. Run `ip -br a` to see a list
INTERFACE=eth0

# The IP address that will be set on the docker container
# The last 4 IPs in the subnet are available for use.
IPADDR=172.21.255.252

# The IP address that will be set on the host to manage the docker container
# The last 4 IPs in the subnet are available for use.
MGMTIP=172.21.255.253

# The IP subnet in the form NETWORK/PREFIX
SUBNET=172.21.0.0/16

# The IP of the gateway.
# Don't leave blank. Enter a valid ip from the subnet range
# The last 4 IPs in the subnet are available for use.
GATEWAY=172.21.255.254

# The ports for web management access of the docker container.
# ttyd tail, ttyd tmux, frontail, and tmux respectively
HTTPPORT1=8080
HTTPPORT2=8081
HTTPPORT3=8082
HTTPPORT4=8083

# The hostname of the instance of the docker container
HOSTNAME=ztp01
```

## 1.5 Sample docker run script

```
#!/usr/bin/env bash
REPO=toddwint
APPNAME=ztp
HUID=$(id -u)
```

```

HGID=$(id -g)
SCRIPTDIR=$(dirname "$(realpath "$0")")
source "$SCRIPTDIR"/config.txt

# Make the macvlan needed to listen on ports
# Set the IP on the host and add a route to the container
docker network create -d macvlan --subnet="$SUBNET" --gateway="$GATEWAY" \
  --aux-address="mgmt_ip=$MGMTIP" -o parent="$INTERFACE" \
  "$HOSTNAME"
sudo ip link add "$HOSTNAME" link "$INTERFACE" type macvlan mode bridge
sudo ip addr add "$MGMTIP"/32 dev "$HOSTNAME"
sudo ip link set "$HOSTNAME" up
sudo ip route add "$IPADDR"/32 dev "$HOSTNAME"

# Create the docker container
docker run -dit \
  --name "$HOSTNAME" \
  --network "$HOSTNAME" \
  --ip $IPADDR \
  -h "$HOSTNAME" \
  ` # Volume can be changed to another folder. For Example: ` \
  ` # -v /home/"$USER"/Desktop/ftp:/opt/"$APPNAME"/ftp \ ` \
  -v "$SCRIPTDIR"/ftp:/opt/"$APPNAME"/ftp \
  -e TZ="$TZ" \
  -e MGMTIP="$MGMTIP" \
  -e GATEWAY="$GATEWAY" \
  -e HUID="$HUID" \
  -e HGID="$HGID" \
  -e HTTPPORT1="$HTTPPORT1" \
  -e HTTPPORT2="$HTTPPORT2" \
  -e HTTPPORT3="$HTTPPORT3" \
  -e HTTPPORT4="$HTTPPORT4" \
  -e HOSTNAME="$HOSTNAME" \
  -e APPNAME="$APPNAME" \
  `# --cap-add=NET_ADMIN \ ` \
  ${REPO}/${APPNAME}

```

## 1.6 Login page

Open the webadmin.html file.

- Or just type in your browser:
  - http://<ip\_address>:<port1> or
  - http://<ip\_address>:<port2> or
  - http://<ip\_address>:<port3>
  - http://<ip\_address>:<port4>