Best Practice
Large Scale Firewall Management

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Barracuda Networks

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Zero Touch Deployment
Why Zero Touch Deployment?

Large scale rollout
• USB keys require logistics to ensure they arrive in the correct location
• Transport of USB drive is insecure
• Alternatively appliances need to be centrally configured before shipping

Remote locations don’t always have onsite technical resources
• Each “store“ doesn’t have it’s own IT technician or admin

Onsite technical resources cost $$$$ 
• This only increases with scale (headcount, accomentation)

Convenience
Zero Touch Deployment

Lean IT

- Zero-touch self-provisioning hardware for rapid deployment
- No on-site IT needed - Ideal for retail
  - Order Box
  - Configure Box Remotely
  - Box Arrives Directly at Location
  - Plug in Box
  - Box Self-Provisioning
Security, Connectivity & Deployment

Simple to deploy and manage
- ZTD builds on Barracuda’s industry leading Central Management for Firewalls
- Deploy and manage your entire network from one NextGen Control Centre

Secure
- “Minimal” configuration is send from ZTD to appliance
- Security sensitive full configuration only sent between the CC and Box directly

Variety of Appliances
- ZTD will work for F-Series (Phase 1) and FSC Appliances (Phase 2)
What is needed?

ZTD comes with F-series 7.1 (7.0.2 manufactured) release

- Place an order specified as ZTD or claim on demand
- Works with newly ordered desktop appliances (F18, F80, F82, F180, F280 Rev. B, F380, F400 Rev. B)

Control Center with firmware version 7.1

- Using BCC account to link CC to the Zero Touch Deployment Portal

Barracuda Cloud Control Account

- Ordered appliances are linked to customer BCC account
How does it work?

1) Connect to ZTD

2) Push minimal Config

3) Send minimal Config

4) Connect to CC for full Config

5) Send full Config to unit
Workflow for a new appliance being sent to a new location. Appliance is shipped from Barracuda (or distributor) directly. Workflow could also be used to replace a legacy FW in a current location.
Workflow for swapping out a current appliance at a store (‘RMA’). Replacement appliance is shipped from Barracuda (or distributor) directly. Same easy automated process as ordering an appliance for new store.
Workflow for a re-deployment of an existing appliance (factory defaults). Same easy automated process as ordering an appliance for new store.

**Orders**
- Delete config of unit from ZTD
- Push existing config to ZTD
- Waits for appliance to go online
- Appliance connects to ZTD
- Customer manages appliance

**Control Center**
- Pushes full configuration to appliance
- Appliance Dropped from ZTD

**Zero Touch Deployment**
- Install unit from scratch with 7.1
- Plug into network and power up
- Gets IP (DHCP) and Internet connection
- Connects directly to CC
- Configures itself for CC connect
- SSL

**Appliance**
- SSL
- TINA

* Original Box must have been ordered post ZTD GA
Manage via the Control Center

### Appliances and Configurations

<table>
<thead>
<tr>
<th>Type</th>
<th>Range</th>
<th>Cluster</th>
<th>Box</th>
<th>Serial</th>
<th>Status</th>
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<td>F280B</td>
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Monitor via the ZTD Web UI
LIVE DEMO
Named Networks
IPv4 addresses are simple

127.0.0.1
172.16.10.1
213.253.147.131
IPv6 addresses are not

2001:0db8:85a3:0000:0000:8a2e:0370:7334
2001:db8:85a3:0:0:8a2e:370:7334
2001:db8:85a3::8a2e:370:7334
IP-less configuration (Named Networks) concept

1st Octet
- NetPrefix
- 10.0.0.0
- Bit 1-8 "Internal"

2nd Octet
- NetTemplate
- Bit 9-16 "Location"
- Template "Vienna"
- 10.17.x.x
- Template "Innsbruck"
- 10.27.x.x

3rd Octet
- NetTemplate
- Bit 17-24 "Unit"
- Template "DEV"
- 10.x.33.x
- Template "QA"
- 10.x.43.x

4th Octet
- NetTemplate
- Bit 25-32 "Device"
- Template "Gateway"
- 10.x.x.1
- Template "Printer"
- 10.x.x.250
Named Networks Editor (NextGen-Admin)

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<th>Location</th>
<th>Internal</th>
<th>DynBits: 9-16</th>
<th>DynBits: 17-24</th>
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<td>Innsbr...</td>
<td>10.27.**</td>
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<td></td>
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</table>

| Device            | 10.**1.** | **           |               |               |
| Printer           | 10.**250  | **           |               |               |
Named Networks Editor (NextGen-Admin)
## Named Networks Visibility

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Named Networks advantages

- Structure and flexible masks for IPv4 (v7.1) & IPv6 (v7.2)
- Support for Host and Networks
- Binary presentation and integrated conversion (hex/dec)
- Built-in “Subnet Calculator” in NG Admin
- Visualization with names instead numbers (Troubleshooting)
- Set on single Bits (not fixed to octets xxxx.yyyy.xxxx.yyyy)
- Fit into existing and growing network topologies
Thank You
Screen Shots
Managed via the Control Center
Push Configuration to ZTD

Select the matcher type:
- Serial Number

Enter the matching value:
- 831955
- 831955
- 832793

[OK] [Cancel]
Viewed via the ZTD Web UI
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