Системы зеркалирования трафика

Новый инфраструктурный уровень доступа к трафику
Существующие ограничения доступа к трафику

Ресурсов не хватит

Центры обработки данных
- SPAN Ports
- Taps
- Inline Bypass

Узлы связи и коммутации
- SPAN Ports
- Taps

Распределенные сети
- SPAN Ports
- Taps
- Inline Bypass

Системы мониторинга
- Управление сетью
- COPM
- APM
- IDS, DLP...
- SIEM
- Анализ качества
Комплексная архитектура зеркалирования и обработки трафика
Стандартный сценарий
Сценарий с применением сплиттеров

Network Monitoring Tools
- Protocol Analyzer
- Application Performance
- Packet Capture
- Web Application
- IDS IPS
- Database Security
- DoS
- Lawful Intercept

Network Diagram:
- Campus
- Branch
- Core
- Data Center
- Cloud

Equipment:
- TAP
- SPAN
- BYPASS
- vTAP
Network Monitoring Tools

- Protocol Analyzer
- Application Performance
- Packet Capture
- Web Application
- IDS IPS
- Database Security
- DoS
- Lawful Intercept
- 2G
- 2G
- 2G
- 10G
- 1G
- 1G
- 1G
- 10G
- 1G
- 1G
- 10G
- 10G
- 2G

Features:
- De-duplication
- Time Stamping
- Trimming & Stripping
- Burst Protection
- Load Balancing
- Regeneration
- Aggregation
- Flow Linking
- Filtering

Ixia Network Packet Brokers

Connection Points:
- Campus
- Branch
- Data Center
- Cloud

Technologies:
- SPAN
- TAP
- BYPASS
- VTAP
- 1G
- 2G
- 10G
- 2G
### FlexTap (1 / 10 / 40 / 100G)

- **Innovative FlexTap**
  - 1-100G SM and MM
  - High density design saves rack space
  - All-optical
  - Flexible deployment, up to 24 Taps in 1U

- Secure, intelligent remote management and ProPush™ statistics

- Zero delay technology eliminates packet drop

- Single and high density bypass configurations

- Multi-stream heartbeat with micro second response

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### Strengths

| Deployment Flexibility | Security and Reliability | Industry Leading Recovery Times |

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**Ixia TAPs and Bypass Switches Provide the Industry’s Broadest and Most Robust Access Portfolio**
## Продуктовая линейка IXIA NTO

<table>
<thead>
<tr>
<th>Capability</th>
<th>Enterprise</th>
<th>Carrier-Class/NEBS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Performance 10/40/100G</strong></td>
<td>5288</td>
<td>5293</td>
</tr>
<tr>
<td></td>
<td>• Flexible, scalable, high density</td>
<td>• High-density, Carrier-Grade</td>
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<tr>
<td></td>
<td>• 100G, 40G &amp; 10G</td>
<td>• 100G, 40G &amp; 10G (NEBS)</td>
</tr>
<tr>
<td></td>
<td>• 4x 100G, 16 x 40G, or 64 x 10G</td>
<td>• 4x 100G, 16 x 40G, or 64 x 10G</td>
</tr>
<tr>
<td><strong>Flexible &amp; Scalable 10/40/100G</strong></td>
<td>5268</td>
<td>5260/3</td>
</tr>
<tr>
<td></td>
<td>• ControlTower Architecture</td>
<td>• ControlTower Architecture</td>
</tr>
<tr>
<td></td>
<td>• 16 x 40G, or 64 x 10G</td>
<td>• 16 x 40G, or 64 x 10G</td>
</tr>
<tr>
<td><strong>Advanced 1/10G</strong></td>
<td>5236</td>
<td>5273</td>
</tr>
<tr>
<td></td>
<td>• High-performance 10G</td>
<td>• 10G networks (NEBS)</td>
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<tr>
<td></td>
<td>• 24 x 10G</td>
<td>• 24 x 10G</td>
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<tr>
<td><strong>Entry</strong></td>
<td>5204</td>
<td>211x</td>
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<tr>
<td></td>
<td>• Small Enterprise</td>
<td>• Medium Enterprise</td>
</tr>
<tr>
<td></td>
<td>• 4 x 10G + 20 x 1G</td>
<td>• 10/1G + Advanced</td>
</tr>
</tbody>
</table>

### Strengths

- Rich Feature Set
- Carrier Class Reliability
- Easy Configuration and Management
- NTO Packet Brokers Bring Intelligence and Scalability to Visibility Architectures to Maximize Tool Capability
NTO 7300 Platform Summary

7U Chassis with 6 Slots
Best Density in the Industry! (584G/U)
  – 384 Ports of 10Gb (via 40Gb breakout)
  – 288 Ports of Native 10Gb SFP+
  – 96 Ports of 40Gb
  – 24 Ports of 100Gb

High Availability Design
  – Redundant Fans
  – Redundant DC Power (1U AC Shelf)
  – Redundant Fabrics
  – Hot-Swap Capable (Post-RTS)

Switching Capacity: 3.8Tb/s
Control Tower Ready
NEBS 3 Ready

Ready at Initial Ship:
  • 6 Slot Chassis w/non-block Fabric
  • 48 port 1/10G Line Card
  • 16 port 40G Card
  • 4.0 Application Feature set
  • NEBS
  • AC or DC Power
## Продуктовая линейка IXIA - Netoptics

<table>
<thead>
<tr>
<th>Product</th>
<th>Key Benefits</th>
</tr>
</thead>
</table>
| **10G Load Balancing** | • Combined feature set: Tap, Aggregation, Regeneration, Dynamic Load Balancing  
• Distribute traffic to multiple tools for parallel processing |
| xBalancer | |
| **Timestamping** | • Combined feature set: Tap, Aggregation, Regeneration, Static Load Balancer, Timestamping |
| Director xStream Pro | |
| **10G Monitoring Switch** | • Combined feature set: Tap, Aggregation, Regeneration, Static Load Balancer |
| Director xStream | |
| **1G Monitoring Switch** | • Aggregation, Regeneration  
• Deep Packet Inspection  
• L2-7 Filtering |
| Director and Director Pro | |
| **10G Aggregation** | • Aggregates multiple traffic streams for monitoring by a single tool |
| iLink Agg xStream | |

### Strengths

- **High Performance**
- **Broad Feature Sets**
- **Kernel Level Software**

Forward relevant network traffic from multiple links to multiple monitoring tools for monitoring and analysis.
Recap – Ixia NTO Benefits

Better Network Visibility

- Extend the range and depth of monitoring coverage
- Eliminate SPAN and TAP shortages
- Increase network visibility points
- Protect investment in existing network monitoring tools
- Scale to meet high-density and 40G monitoring needs
- Simplify monitoring with easy-to-use, configure & deploy solution

Reduced Tool Costs

- Save money by reducing the number of duplicate tools
- Monitor 10G links with less expensive 1G tools

Increased Staff Productivity

- Eliminate the complexity of setting up and maintaining complex CLI filter code
- No more roaming the data center to temporarily make and break SPAN ports

Security for Business

- Add a layer access control between your core / production devices & users
- Secures access to sensitive data and tools with role based access control