The New Evolution of
Transparent Video Caching

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Qwilt = Win⁴ Solution

Qwilt (n.) - Bringing Service Providers and Content Providers together
Video Delivery Today

Each view traverses entire network

Carriers incur most infrastructure costs
See no direct revenues from value created
80/20 Rule of Video Delivery

In a Given Hour 20% of Video Titles Consume 80% of the Bandwidth
In-Network Transparent Video Delivery

Reduced CAPEX/OPEX across entire network
The Key Ingredients
Unified Video Delivery Platform

Internet Users

Original Content

QB-Series
Transparent Video Delivery
Video Analytics
Simulate caching results on your real traffic
## Impact of Transparent Caching
It’s no longer just about Transit Reduction

<table>
<thead>
<tr>
<th>Cost Savings</th>
<th>Best $$ $$</th>
<th>Better $$</th>
<th>Good $</th>
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### Operator Network

- **Edge**
- **Access**
- **Aggregation**
- **Core**

- STB
- IP RAN
Space at Subscriber Edge is at a Premium
1. **Classification and Analysis**
   Throughput per RU

2. **Video Delivery**
   Throughput per RU
5x Faster, Smaller, and More Power Efficient

Legacy Caching Architectures

Video Optimized QwOS Architecture

Data Switches
Mgmt Server
Storage Enclosures
Cache Engines

Single Unified Device
Transparency
Transparency

1. **No changes** required by content provider, network operators or subscribers

2. **No changes** to content provider business logic

3. **Maintain video value chain**’s ability to troubleshoot and control solution
   - Announce presence instead of Hiding
     - Use HTTP Redirect like many CPs use in their infra
     - Products using invisible spoofing make it impossible to debug and breaks CP business logic
Inline Solutions
Place your network at Risk
Out-of-Band Inline for Best Results

- **Easier** to integrate into existing infrastructure
- **Non-invasive** zero risk of network interference
- **No physical hop** or routed hop in the network
- **Scales** readily and cost-effectively

Result = Lowest TCO
Cooperative Transparent Video Caching: CDN Extension
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**Network Operators**
- Reduce CAPEX
- Optimize OPEX
- Ensure video QoE
- Network agility
- Video efficient network

**CDNs**
- Improve profitability
- Reduce network infrastructure costs
- Stronger operator relationships

**Consumers**
- TV-like online viewing experience
- Unlimited video on-demand on any device

**Content Providers**
- Ensure consumer viewing experience
- Start-up delay and latency minimized
- Reduced costs
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Thank You!

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