Business Unlimited

Integrated Business

Lower TCO
ISR – The Integrated Business Solution!

Overlay Appliances
- Router
- Switch
- Security Appliance
- Wireless LAN
- Voice Appliance
- WAN/App Optimization

VS.

Integrated Services Router
- Cisco ISR 3845 with integrated Security, Voice, Wireless, Video, WAN Optimization and Switch

Traditional Business

Today’s Business
# Distributed Business Landscape

<table>
<thead>
<tr>
<th>80% of enterprise workers work outside headquarter style building.</th>
<th>Nemertes Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational expenses dominate total cost of ownership, with operation costs accounting for 79% of the equipment TCO.</td>
<td>Gartner Group</td>
</tr>
<tr>
<td>There are 1.5 million branch offices in the US alone—1/3 of all employees work in a branch.</td>
<td>US Department of Commerce</td>
</tr>
<tr>
<td>Branches consume 70-90% of business resources.</td>
<td>NetworkWorld</td>
</tr>
</tbody>
</table>

**WHY?**
- To be closer to diverse markets and customers
- Localized Decision Making
- Availability of Human Resources
- Availability of High Speed Access
- Cost control
Top Ten Causes for Higher TCO

1. Hardware Diversity
2. Configuration Complexity and Support Complexity
3. Security and Regulatory demands
4. Conflicting Performance Criteria
5. Higher costs for Incremental Services
6. Higher recurring expenses
7. Minimal Opportunities for Automation
8. Multiple Maintenance Contracts
9. Minimal Synergies Between Applications
10. Lack of business agility and high upgrade costs
Network Total Cost of Ownership (TCO)
Network Costs = 20% Purchase, 80% Operations

- Capital Expenditures* (20%)
- Operational Costs* (80%)
  - Troubleshooting
  - Maintenance
  - Skilled Technical Staff
  - Facilities
- Lost Opportunity Costs
  - Missed or Delayed Business Opportunities Due to Unavailable Technologies

- Capital expenditure is one element of the total cost of a system
- Operational and opportunity costs outweigh capital expenditures

Source: Gartner Group, 2005.
Lower CAPEX with ISR

Overlay Appliances

- Router
- Switch
- Wireless LAN
- WAN/App Optimization
- Security Appliance
- Voice Appliance

Integrated Services Router

Cisco ISR 3845 with integrated Security, Voice, Wireless, Video, WAN Optimization and Switch

5 to 30% CAPEX SAVINGS

Buying individual products drives up initial outlays by 5-30%

Multiple deployment costs for each additional technology

Lengthy recertification for new products

- $50k
- $40k
- $30k
- $20k
- $10k

Integrated Appliance

- Device 1
- Device 2
- Device 3
- Device 4
- Device 5
- Device 6
- Device 7

- CISCO 3845
- NM-ESW
- IOS FW
- CME
- NM-WLC
- NM-WAAS

Installation

- Four
- Three
- Two
- One

- ISR Deployment

- $1500
- $1000
- $500

Integrated Appliance
ISR TCO Model – Implementation expenses and Operational expenses Model

ISR vs. 6 Overlay Appliances

Comparison of Implementation and Operational Expenses

Direct Costs:
• Management Tools
• Annual Maintenance Costs
• Facility
• Deployment

Indirect Costs:
Network Availability (planned downtime, trouble-shooting, revenue loss and employee productivity loss)
TCO Analysis: Direct and Indirect Costs

Total Cost of Ownership

Cisco Integrated Services Router
Competitive Overlay Appliances

Over 70% OpEx Reduction

Source: Cisco
### Cost Benefits

<table>
<thead>
<tr>
<th>Costs</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Maintenance Contracts</td>
<td>4X savings over 3 years</td>
</tr>
<tr>
<td>Greener Choice (facilities, power, cooling)</td>
<td>Owning an ISR costs 1/5 compared to overlay appliances</td>
</tr>
<tr>
<td>Simple Elegance – the Power of Integration</td>
<td>1/3 Network Mgmt Systems and Deployment Costs</td>
</tr>
<tr>
<td>Availability – cost of outage and downtime</td>
<td>It costs 2.5 times more to own overlay network appliances</td>
</tr>
<tr>
<td>Employee and revenue related losses</td>
<td>ISR offers 4X greater availability and cost savings.</td>
</tr>
</tbody>
</table>
## ISR: Lower TCO, Compelling ROI

### Lower Total Cost

<table>
<thead>
<tr>
<th></th>
<th>ISR</th>
<th>Appliance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Costs</td>
<td>$12,600</td>
<td>$57,800</td>
<td>&gt; 4X</td>
</tr>
<tr>
<td>Indirect Costs</td>
<td>$3,100</td>
<td>$14,200</td>
<td>&gt; 3X</td>
</tr>
</tbody>
</table>

*Does not include equipment pricing

### Higher ROI: Owning an ISR provides more than 300% improvement in ROI over three years.
What If – no ISR!

**Cost of Doing Nothing**

Over **$560K MORE** in operational expenses for a 10 branch network over 3 yr period

**Opportunity Costs (not monetized)**

- MORE network complexity
- MORE training requirements for multiple NMS
- MORE Management of diverse Annual Maintenance Contract
- MORE troubleshooting
- MORE finger pointing
- NO branch evolution and headroom for growth
The Roadmap to Lower TCO

Objective Lower TCO Through:

5 Utilization
- Deploy new services on existing infrastructure
- Maximize the availability, use of networked resources

4 Automation
- Minimize service visits
- Maximize user and staff productivity

3 Integration
- Minimize the number of network devices, control points
- Maximize the impact of each network device

2 Standardization
- Minimize network complexity, Eliminate service gaps
- Maximize utility and lifetime of network components

1 Optimization
- Characterize networking needs
- Maximize bandwidth utilization, network leverage

Each Stage Builds on Underlying Stages
ISR – The Integrated Business Solution!

Overlay Appliances

Router
Switch
Wireless LAN
WAN/App Optimization
Security Appliance
Voice Appliance

Integrated Services Router

Cisco ISR 3845 with integrated Security, Voice, Wireless, Video, WAN Optimization and Switch

Traditional Business

VS.

Today’s Business
TCO Analysis: Redundant Configuration

Total Cost of Ownership

- Revenue Loss
- Employee Productivity
- Unplanned Downtime Losses
- Planned Downtime Losses
- Maintenance Contracts
- Facilities (Space, Power, Cooling)
- Implementation Costs
- NMS Costs

Still provides almost 60% OpEx Reduction