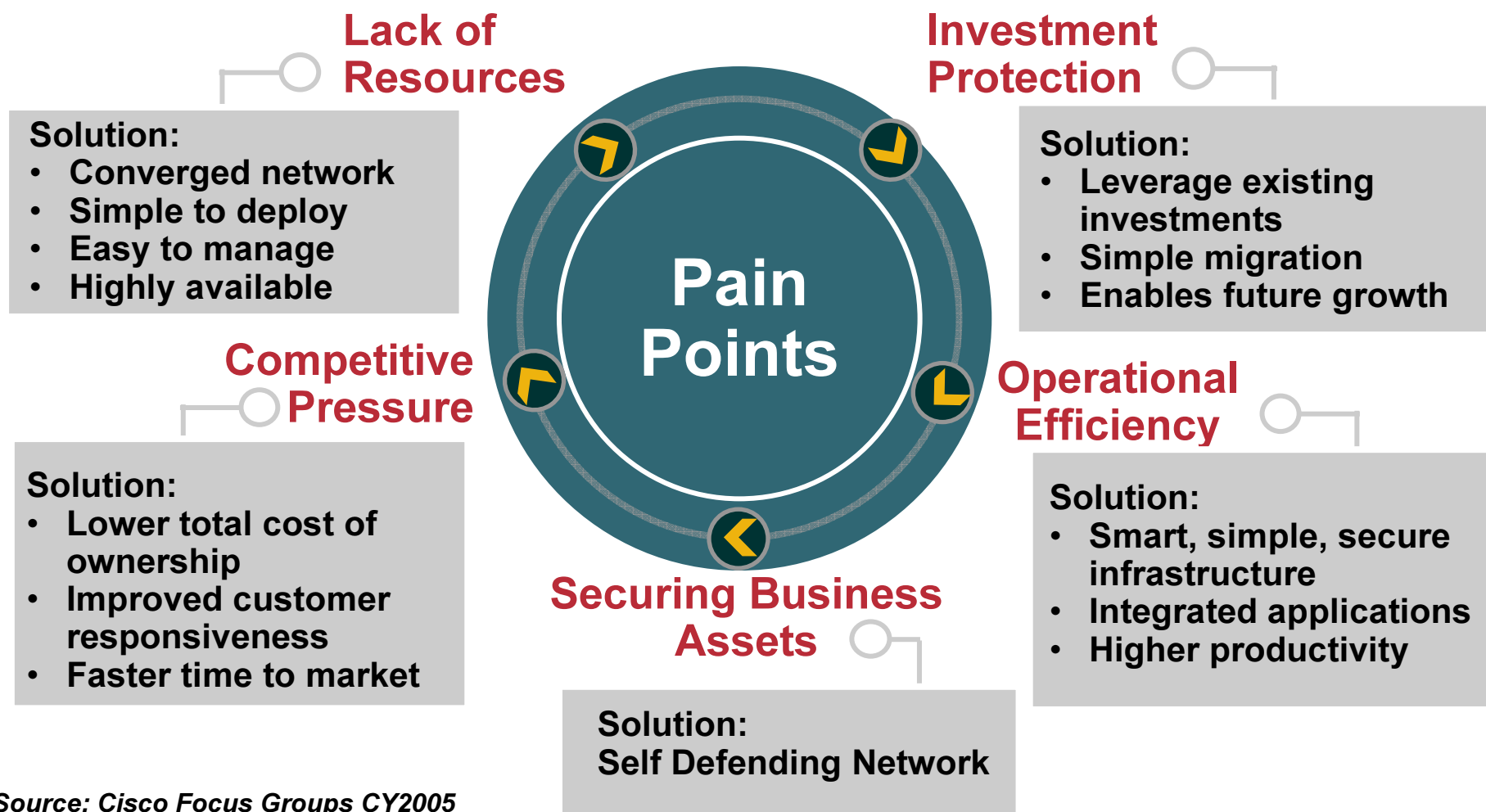




# Cisco Catalyst Express 500 Series Switches

**Smart, Simple and Secure Networking for the  
Growing SMB**

# Customer Pain Points And Solution Requirements



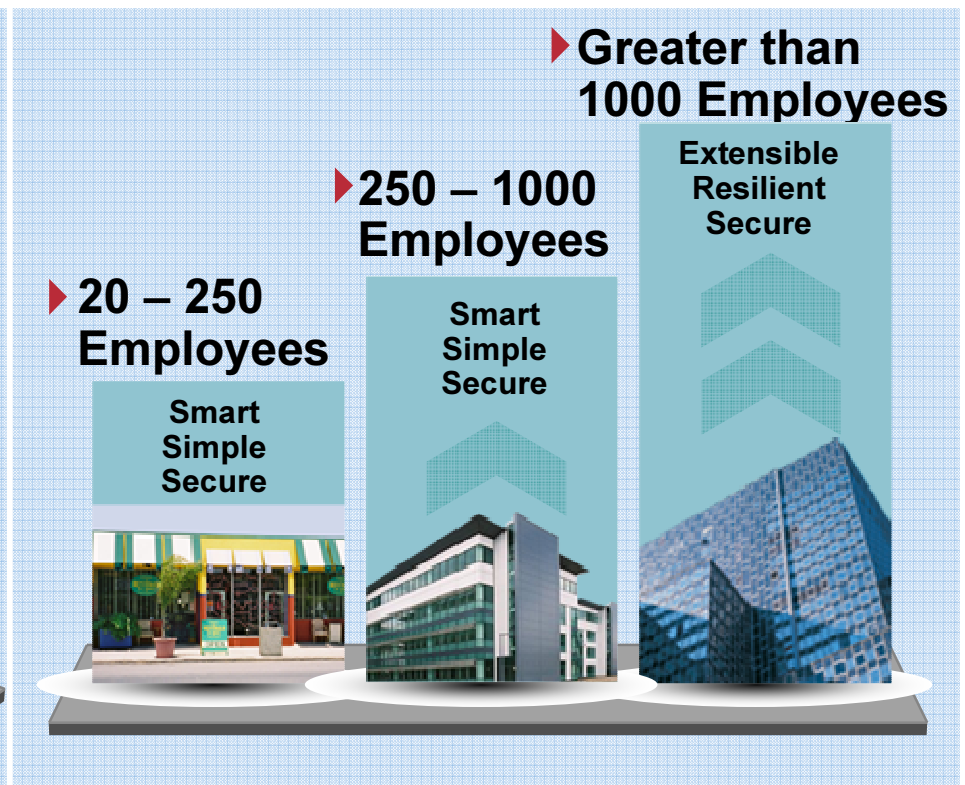
Source: Cisco Focus Groups CY2005

# Tailored for Your Needs

**Instead of Scaled Down  
Enterprise Solution..**



**Designed and Built from the  
Ground-up for Target Market**



# Easier To Do Business With Cisco



- **Affordable solutions built specifically for small and mid-market customers that increase competitive advantages and profitability**

# Cisco Catalyst Express 500

*Purpose-Built Switching Family for 20-250 User SMB LANs*

Innovative and Advanced  
Technology Ready

**NEW**



**Catalyst Express 500**



**Cisco Network Assistant 3.0**



## **Smart**

*Future proof network with  
Cisco technology and Power  
over Ethernet*



## **Simple**

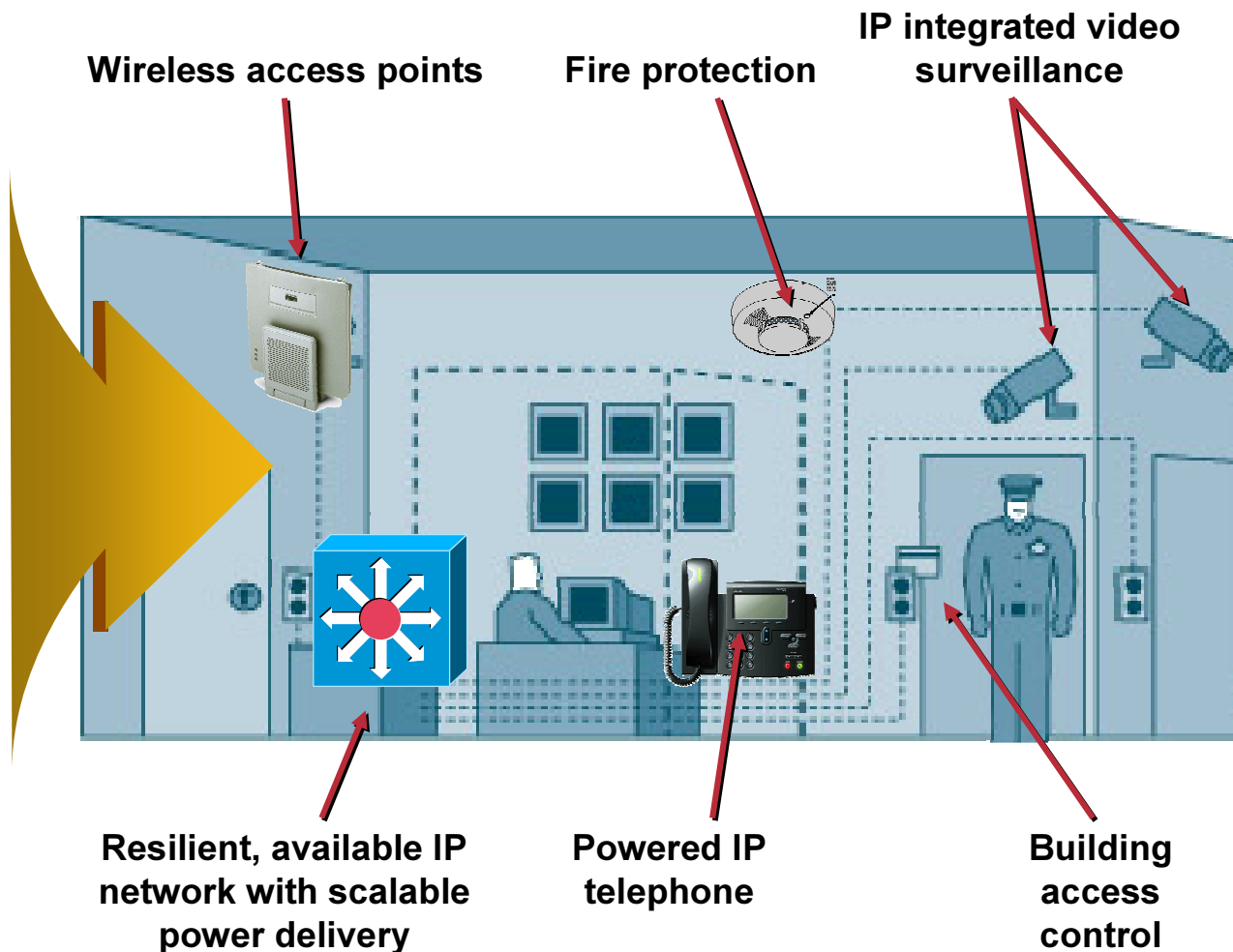
*Eliminate complexity with  
Cisco Network Assistant*



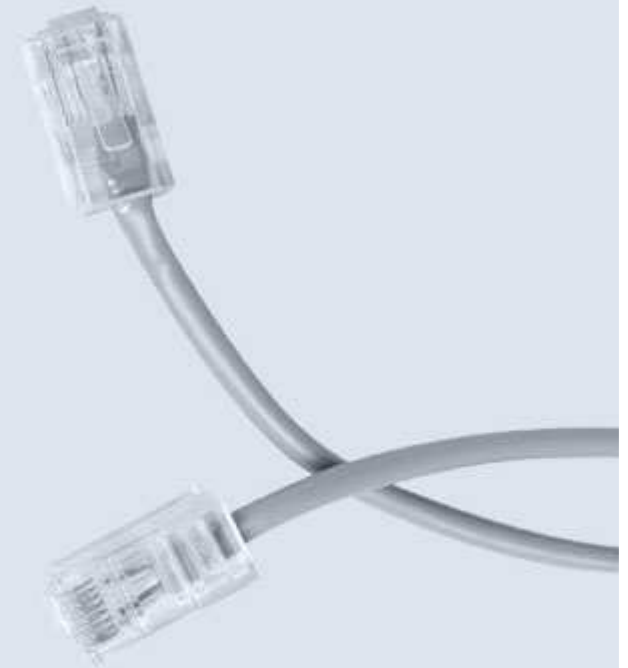
## **Secure**

*Built-in intelligence to  
customize network security  
level*

# A Glimpse into the Future— The Ethernet-Powered Organization



**Power over Ethernet (PoE) delivers 48V DC power over a standard copper Ethernet cable**



**The power and network are used by the connected devices for their operation**

# Cisco Catalyst Express 500 Series Model Overview

## Catalyst Express 500-24TT

**NEW**



- 24 10/100 ports
- 2 10/100/1000Base-T ports

## Catalyst Express 500-24LC

**NEW**



- 20 10/100 ports
- 4 10/100 PoE ports
- 2 10/100/1000BT or SFP ports
- 62W IEEE 802.3af / Cisco prestandard PoE

## Catalyst Express 500-24PC

**NEW**



- 24 10/100 PoE ports
- 2 10/100/1000BT/SFP ports
- 370W IEEE 802.3af / Cisco pre-standard PoE

## Catalyst Express 500G-12TC

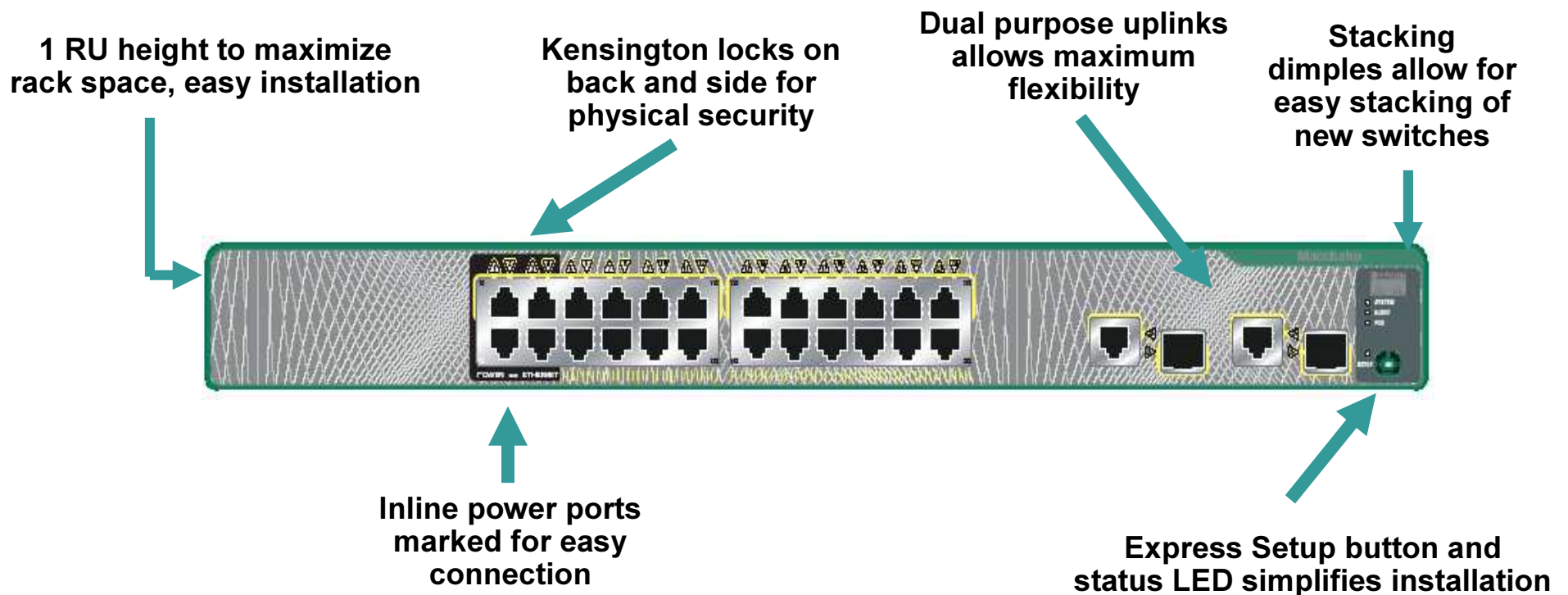
**NEW**



- 8 10/100/1000BT ports
- 4 10/100/1000BT or SFP ports

# Simple and Intuitive Physical Design

## Innovative Design Tailored for Customers with Up to 250 Users

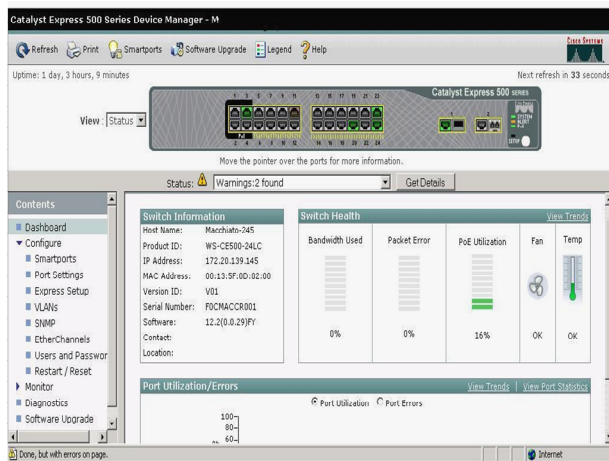


**No console port needed for initialization**



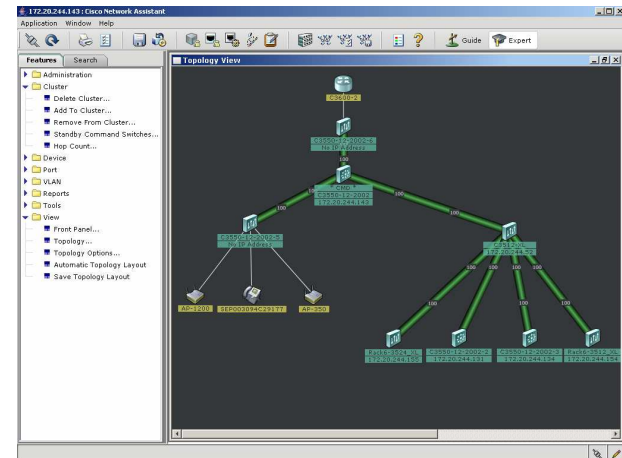
# Management Interfaces

## Device Manager



- Manages a single Device
- Web Based - HTML

## Cisco Network Assistant



- Manages a SMB Network
- Router, Switch, IP Phone, Wireless...
- Web Based - Java

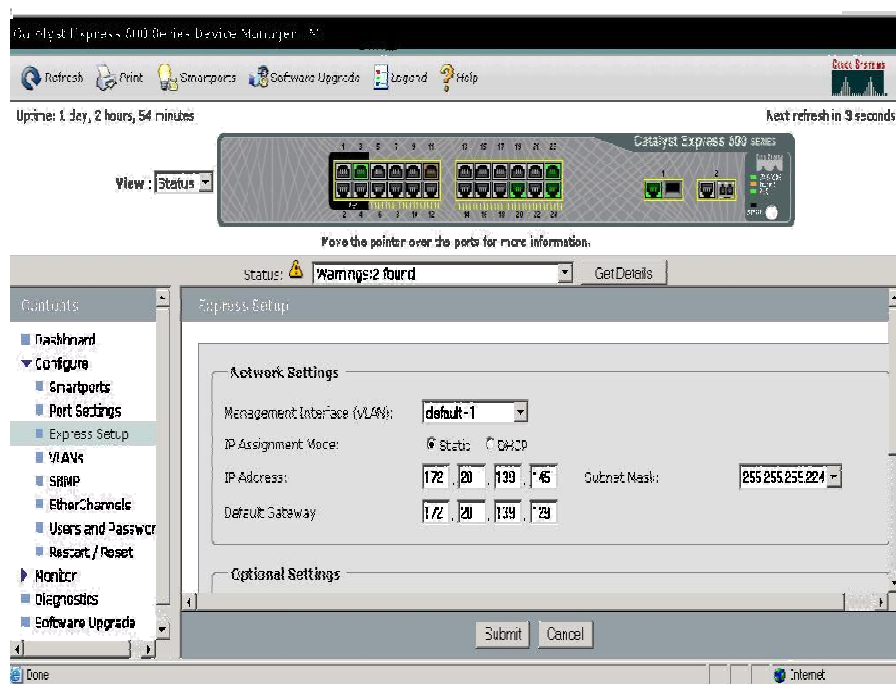


# Express Setup and Device Manager

## Easy Tools to Get Started

**Express Setup** – Web-based GUI provides simple way for network manager to get the Catalyst Express 500 up and running

**Device Manager** – intuitive GUI embedded in the switch for easy configuration, simplified monitoring, maintenance and troubleshooting



# Cisco Network Assistant 3.0

## Intuitive Configuration of the Network

**Simplicity** - Quickly tap into power of Cisco infrastructure to provide topology views and multi-switch management

**Unique Features** for Catalyst Express 500

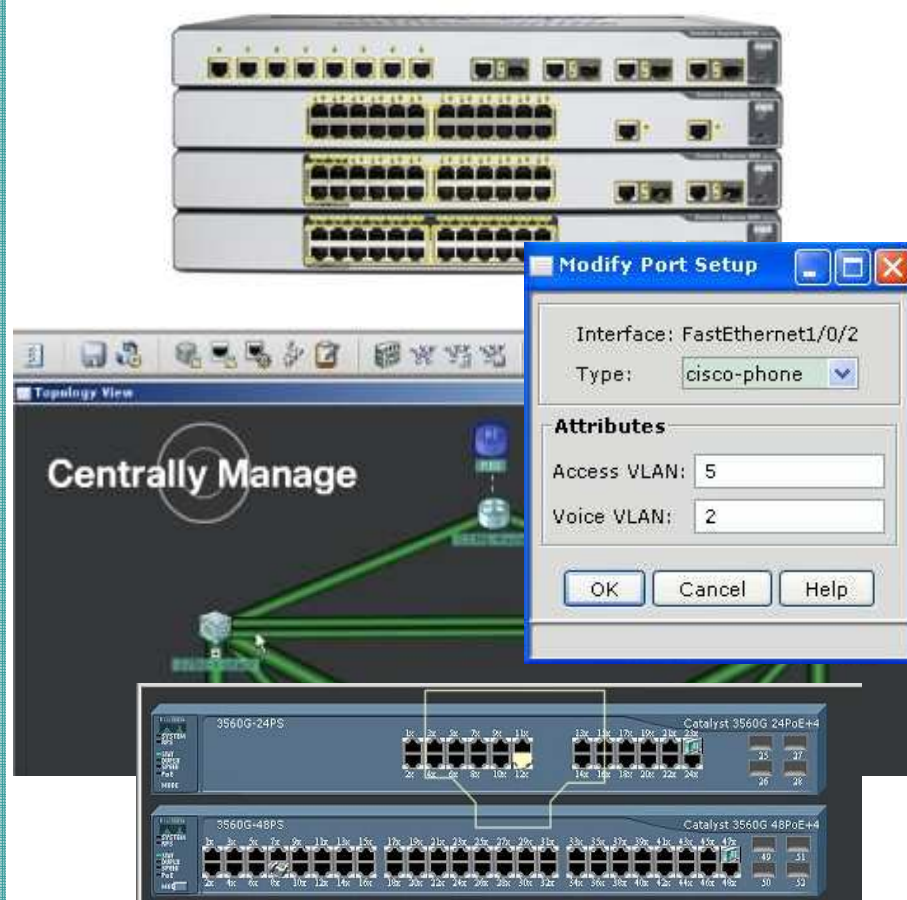
Secure WLAN Deployment

Security Policy Slider

Troubleshooting Advisor

Additional Smartports roles

Auto-suggested configurations



# Smartports Advisor

## Dramatically Simplifying Network Configuration

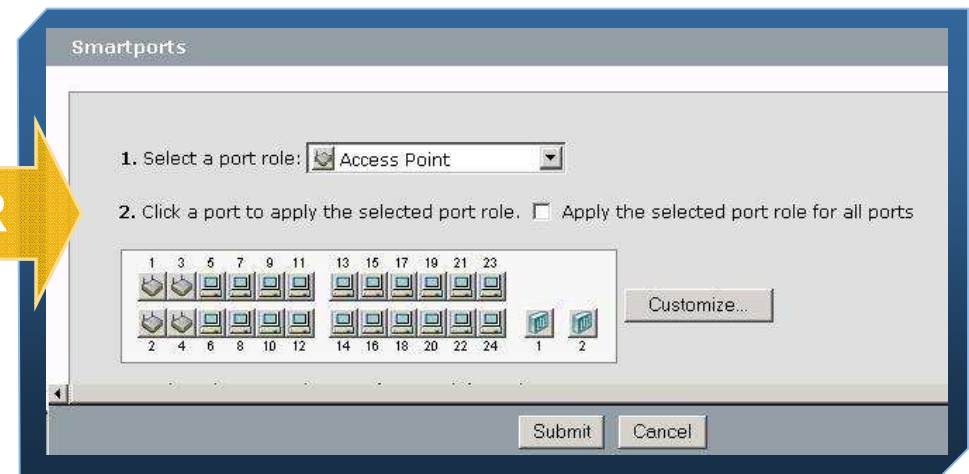
### Traditional Catalyst Switch

```
failureserrdisable recovery cause link-flap
errdisable recovery cause uddl
errdisable recovery interval 60
vtp domain [smartports]
vtp mode transparent
udld aggressive
spanning-tree mode rapid-pvst
spanning-tree loopguard default
spanning-tree extend system-id
```

```
default interface range FastEthernet[1]/0/[1 - 48]
interface range FastEthernet[1]/0/[1 - 48]
switchport access vlan [data]
switchport mode access
switchport voice vlan [voice]
switchport port-security
switchport port-security maximum 3
switchport port-security violation restrict
switchport port-security aging time 2
switchport port-security aging type inactivity
auto qos voip cisco-phone
spanning-tree portfast
spanning-tree bpduguard enable
```

OR

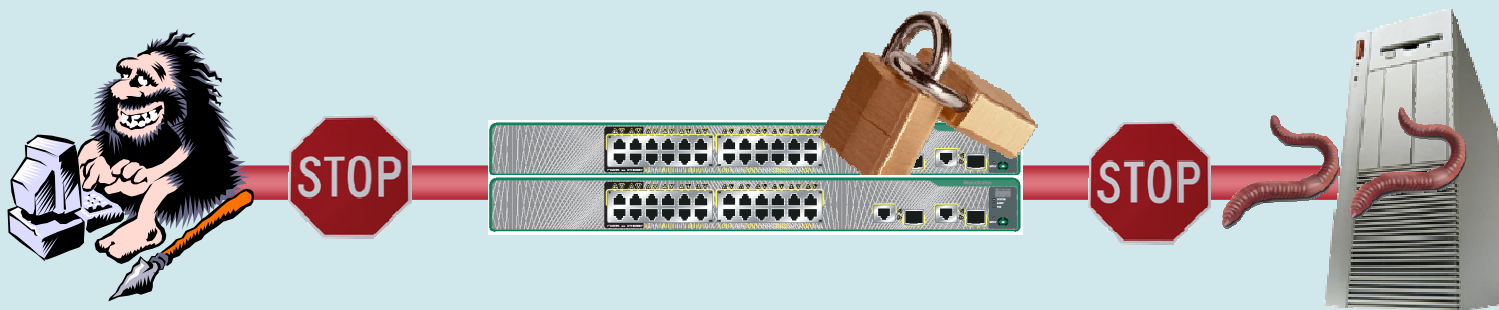
### Catalyst Express 500



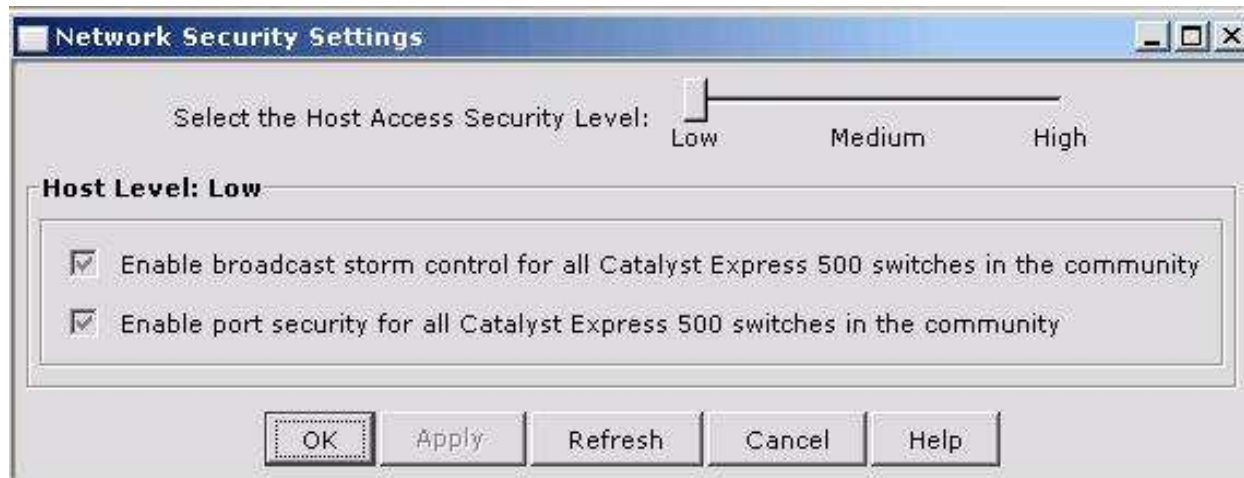
## Smartports Advisor Detects Type of Device Connected and Offers to Automatically Configure Based on CCIE Best Practices

# Built-in Security to Protect Their Business

- **Network level security protection brings security to the next level and minimizes security holes**
- **Self-Defending Network**
  - Protect against spread of worms and viruses with Cisco Clean Access Solutions**
  - Control User Access with Identity-Based Networking Services**
- **Management traffic encryption prevents network tampering**



# Integrated Security Made Easy



## Low: Restricted Number of Devices Allowed per Port

- Security with high flexibility for businesses with limited guest and visitor access

## High: Only Authorized Devices and Authenticated Users Allowed on Network

- Maximum protection for business environments where security is critical

## Medium: Only Authorized Devices Allowed Onto the Network

- High level of protection against rogue devices

## Management Traffic Encryption

- Prevents intruders and non-IT employees from sniffing passwords and tampering with the network



# Virus Protection With Cisco Clean Access

## Scans and Quarantines Non-compliant Devices From Your Network



### Scan for Security Requirements

- Check for required version of hot fixes, anti-virus and other software
- Network scan for viruses and worms

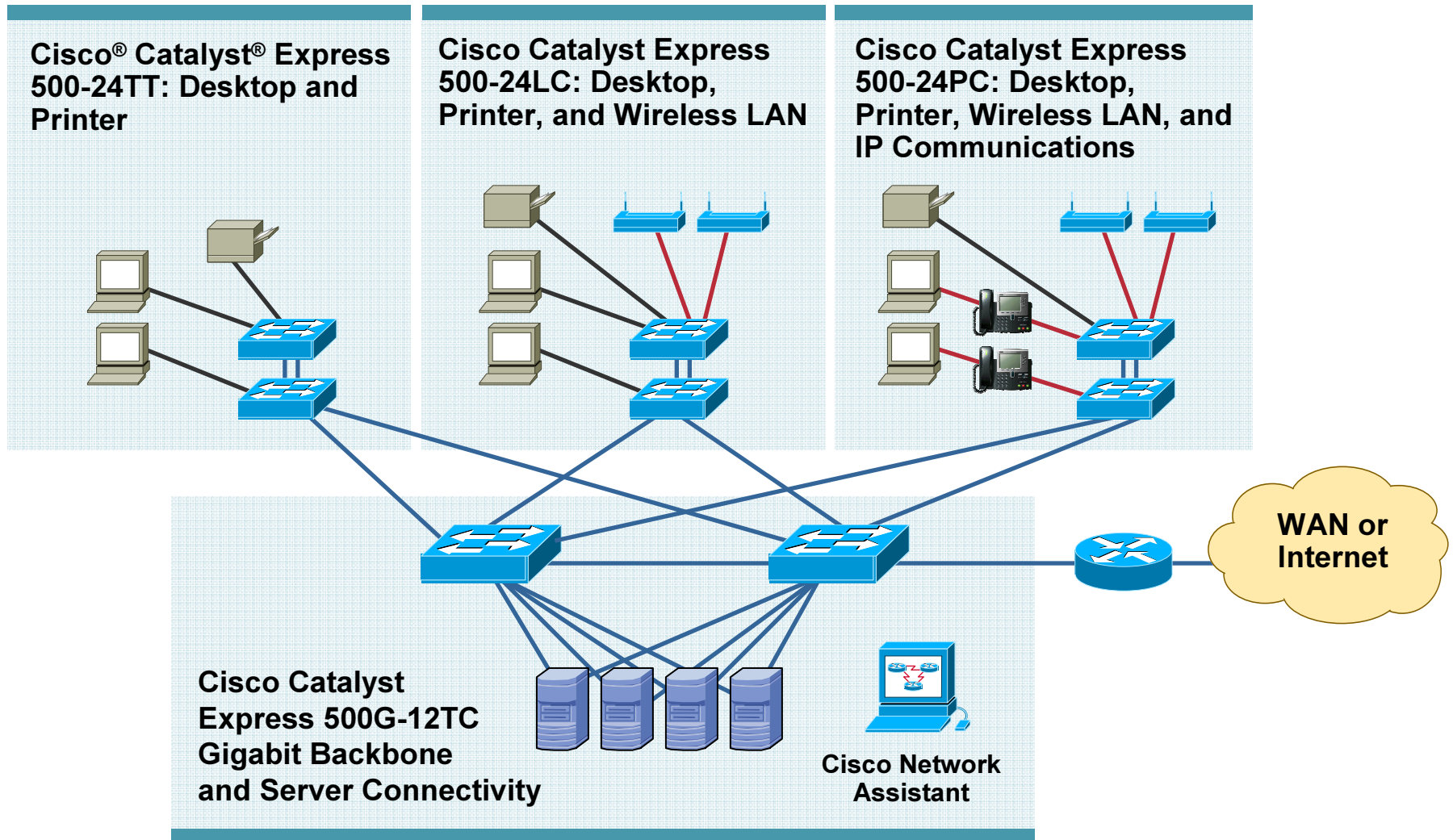
### Network Quarantine

- Isolate non-compliant devices from the network—Preventing spread of viruses

### Repair and Update

- Network-based tools for vulnerability and threat remediation
- Non-compliant devices allowed onto the network only after remediation

# Typical Deployment Scenario





# Troubleshooting Advisor: One-Click Diagnostics Test

The screenshot shows a web-based interface for running diagnostic tests. It features two radio button options: 'Run standard diagnostic test.' (which is selected) and 'Run standard diagnostic test along with link test.' Below the second option is a descriptive text: 'Link test enables you to remotely identify connectivity issues including the location of cable breaks and faults, speed mismatch, and STP blocked ports.' A 'Port :' label is followed by a dropdown menu currently showing 'Select a port'. At the bottom of the form is a 'Start' button.

☒ Run standard diagnostic test.

☐ Run standard diagnostic test along with link test.

Link test enables you to remotely identify connectivity issues including the location of cable breaks and faults, speed mismatch, and STP blocked ports.

Port :



- **Simple troubleshooting mechanism to instantly determine location and type of per-port fault**
- **Allows for fast problem resolution without specialized expertise**

# Troubleshooting Advisor: Corrective Action Recommendation

**How Bad  
Is the  
Problem**

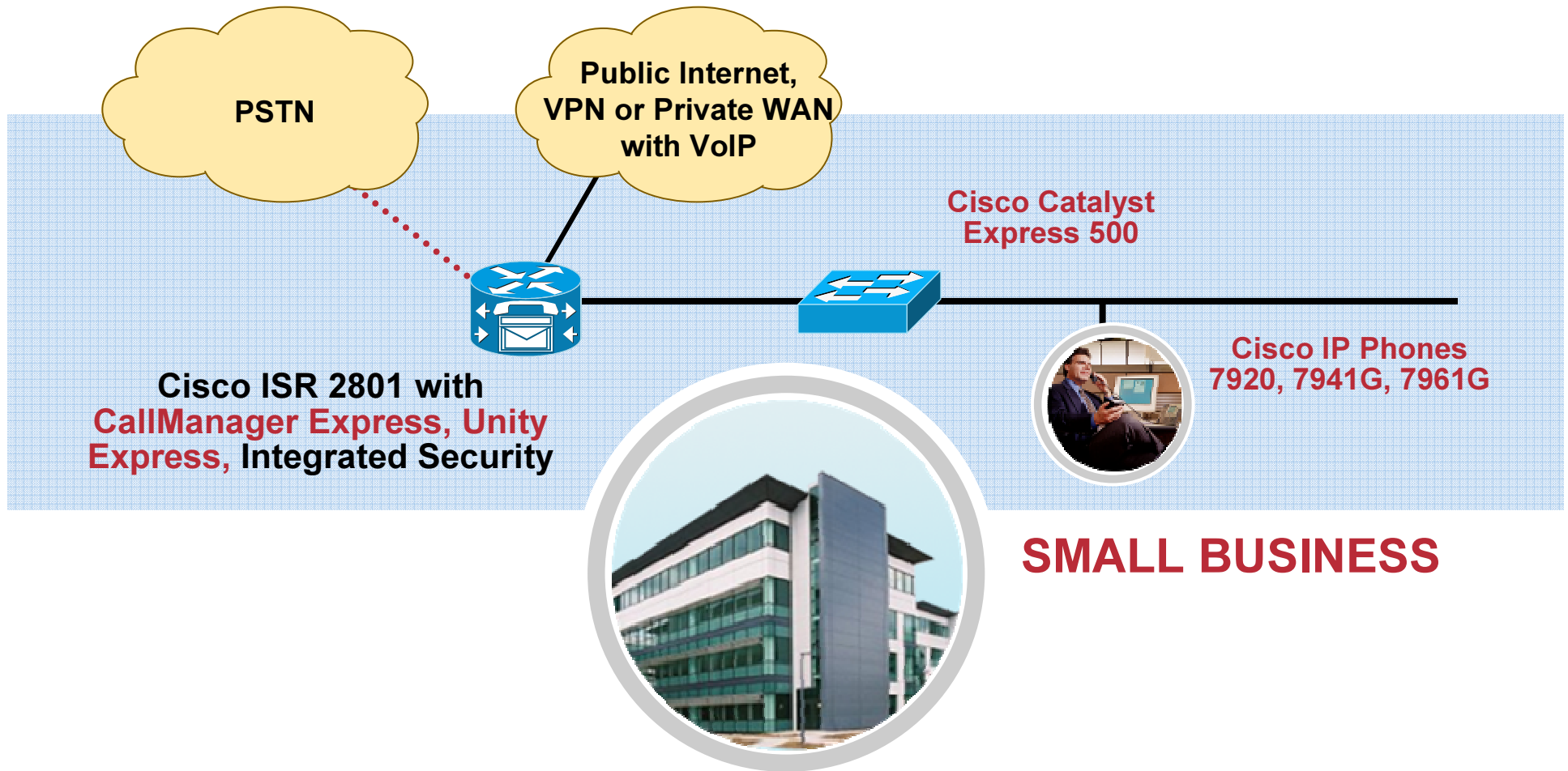
**What the  
Problem is**

**What to do  
About It**

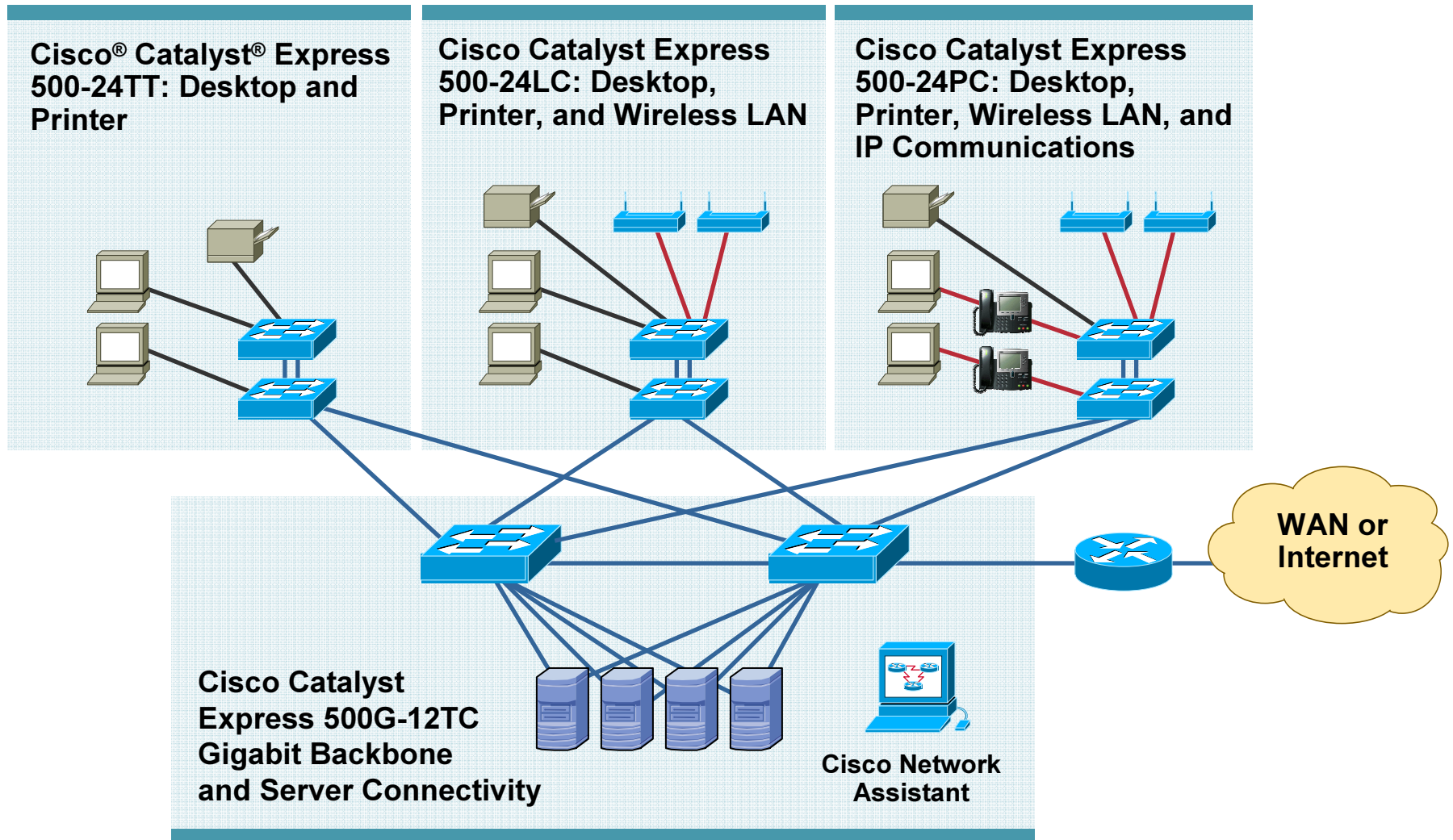
Severity ▲	Description	Recommendation
 4-Warning	Port Fa2: Detected a mismatch of the Smartports role and the connected device type on this port.	Use the Smartports window to apply the role that matches the device type or disconnect the connected device. Go to <a href="#">Smartports</a> screen to fix the problem
 4-Warning	Port Fa20: Detected a duplex mismatch on this link.	Make sure that both the ports on this link are set to the same duplex setting, or change the duplex setting of this port to "auto".

- **Problem solving made easy—The switch will tell you what's wrong and how to fix it!**

# Typical Solution Deployment That Grows With The Business



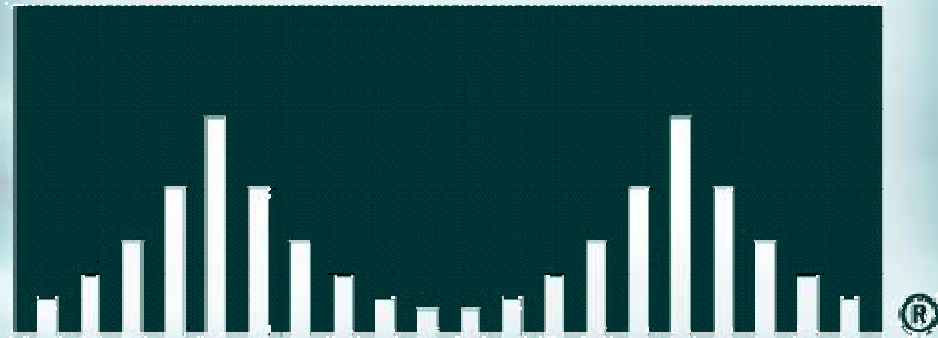
# Typical Deployment Scenario



# Summary of Key Customer Benefits

Key Feature	Benefit
Easy-to-use management tools	Easy to manage switch with GUI Device Manager and Cisco Network Assistant
Smartports Advisor	Optional per-port automatic configuration of CCIE best practices based on device connected
Integrated Security and Cisco Clean Access	Secure business assets and protect network from worms and viruses with Cisco Clean Access solutions
Troubleshooting Advisor	The switch tells the network manager what the problem is and recommends how to correct it.
Power over Ethernet	Allows for rapid deployment of IP Phones, Access points and other devices without the cost of running AC power to the network location

# CISCO SYSTEMS



## EMPOWERING THE INTERNET GENERATION