COMCAST CALIFORNIA



COMCAST BUSINESS Partnership that begins here at home... Pleasanton California!!

November 13, 2019

Prepared by John Lengyel, Sr Enterprise Account Executive







Introductions: Your Local Comcast Business Team

John Lengyel, Sr Enterprise Senior Account Executive - (925) 200-1059 / (925) 895-4938 - john_lengyel@comcast.com

Partnering with local Business Leaders and IT Executives on Digital Transformation. 30 years of delivering business and technology solutions that meet the evolving needs of businesses. Enabling organizations to be more profitable, agile and competitive. Our Comcast team delivers an end to end, single provider partnership, focused on you, your people and your customers.

Debbie Albee, Enterprise Account Executive – (925) 596-0301 - debbie albee@comcast.com

Veteran Enterprise Business Solutions Specialist – Fiber Ethernet, SD WAN, Advanced Voice, Cloud and Data Center and Threat Mitigation

Howard Wilner, Enterprise Solutions Engineer - (925) 337-5014 - howard_wilner@comcast.com

Technical Sales Professional with 17+ years in sales and telecommunication design. Experience developing effective solutions to address systematic business challenges related to Connectivity, Voice, Security and Cloud services in both direct and channel sales environments.

Joe Celentano, Enterprise Sales Director - (925) 424-0908 - joe_celentano@cable.comcast.com

Over 18 years of experience contributing extensive sales and technical acumen to grow revenue for prominent technology organizations.

Rosa Estevez - Spencer, Business Account Executive (925) 519-2188 - rosa estevezspencer@comcast.com

SMB Specialist - Business Class Internet, Voice, TV, Surveillance and Security

JeffCastle, SMB Manager Direct Sales - (925) 785-7514 - jeff_castle@cable.comcast.com

19 years of Leadership Experience, an environment I direct will be filled with great culture, accountability, positive attitude, solid customer satisfaction, fun, financial results, policy acumen, and a strong team mentality.



Comcast Business and Pleasanton 2020: A Shared Community Vision for Business and Growth

Creating and promoting economic opportunity, strengthening and educating our community

Comcast is deeply committed to California, where our nearly 5,000 employees serve more than 3 million customers throughout the state. Our California Headquarters is right here in our amazing Tri Valley in neighboring Livermore. Since 2011, Comcast has invested \$8 billion in California to build, enhance and maintain our systems, networks and infrastructure.

We leverage our media and technology assets across Comcast NBCUniversal to benefit the communities where our employees, customers and partners live, work, play and serve. Since 2011, we have invested more than \$381 million in cash and in-kind contributions to local organizations that share our commitment to improving communities.

We are also committed to making the Internet accessible to as many families in California as possible. In fact, California is the #1 state in the nation to help close the digital divide with Comcast's Internet Essentials program. Nearly 200,000 households, or nearly 800,000 Californians, have signed up for Internet Essentials as of late 2018. https://california.comcast.com



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Comcast is California's leading provider of XFINITY® video, high-speed Internet, "smart home" and phone services. Our X1 entertainment platform — with its innovative voice remote and Netflix and Amazon integration — is changing the way our customers experience TV.

Xfinity Mobile uses America's largest 4G LTE network combined with the most WiFi hotspots nationwide to give customers a better wireless experience.

Xfinity Internet gives customers unprecedented access and control over one of the most important technologies in their lives. We are delivering gigabit speeds, have built the largest network of WiFi hotspots in the U.S. and crated a new, fully personalized home WiFi experience.



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Comcast and NBCUniversal have long recognized that members of the military bring exceptional strengths to the workplace and we actively recruit veterans. Comcast has a commitment to hire 11,000 reservists, veterans and their spouses or domestic partners, bringing our total to 21,000 military hires by the end of 2021.

Former members of the military are just one of the diverse talent pools we draw from and we have employee resource groups (ERGs) dedicated to Veterans as well as Women, Hispanics, LGBTQ, African American and Asian Pacific Islanders. These ERGs offer mentoring programs and networking opportunities to help employees grow professionally and personally.



John Lengyel | Sr Enterprise Account Executive, Comcast Business | California Region john lengyel@comcast.com (925) 200-1059 https://www.linkedin.com/in/john-lengyel-91ba109

We are Comcast



COMCAST NBCUNIVERSAL

Uniqu	uely Positioned at the Intersection Of Med	lia And Technology.			
COMCAST	NBCUniversal				
Comcast Cable	Cable Networks Broadcas		Film	Parks	
Xfinity · TV · Internet · Voice	UNIVERSAL KIDS	NBC Owned Television Stations	FOCUS	UNITY PEAL STUDIOS	
xfinitymôbile COMCAST COMCAST SPOTLIGHT	The Westher Channel westher.com	Sports NBC NEWS	UNIVERSAL PICTURES HOME ENTERTAINMENT	UNIVERSEL STUDIO	
COMCAST SPECTACOR WELLS FARGO CENTER	oravo chiller universal OXY GEN BAY AREA	Televitos	DREAMWORKS WORKING TITLE	EDD WALK	
S COMCAST VENTURES.	Snap Inc. * Snap Inc. * MOVIES.COM SPORTSENGINE Sportsengine Snap Inc. * MOVIES.COM SPORTSENGINE MOVIES.COM SPORTSENGINE MOVIES.COM SPORTSENGINE MOVIES.COM SPORTSENGINE MOVIES.COM SPORTSENGINE MOVIES.COM SPORTSENGINE MOVIES.COM SPORTSENGINE	VOX MEDIA* ** NBC NEWS GOLFNEW	CNBCDIGITAL BUZZFEED* MSNBC	cinepapaya Fixe	

Platforms and Partnerships.....going beyond !!



X1 Platform













Home Automation















Ventures















Symphony



















Venue Services











Welcome to Comcast Business



Comcast Business provides best in class network solutions designed to deliver reliable, innovative and cost-effective communication services.

Serving organizations big and small, Comcast Business is a leading provider of data and voice solutions, offering flexibility, capacity, reliability and an exceptional value.

Comcast has the resources, products and support needed to keep your applications and network optimized for improved operational efficiency while reducing legacy telco spend.

Comcast Business Enterprise Solutions

- Reliable, resilient design High network availability
- Fully scalable solutions Ability to Increase the bandwidth as your applications change
- Broad and diverse network Information travels across our advanced network
- Resilient core architecture Helps optimize the quality of our network performance
- Enterprise Class support 24/7/365 network monitoring and support through our Business Network Operations Center (BNOC)

Comcast Business Core Values





Comcast is the nation's largest Internet provider

- Unencumbered by legacy technology
- Strategically committed to wireline



Culture & Innovation

- A software-defined network platform for continued innovation
- Help businesses adapt to the changes and velocity their operations need

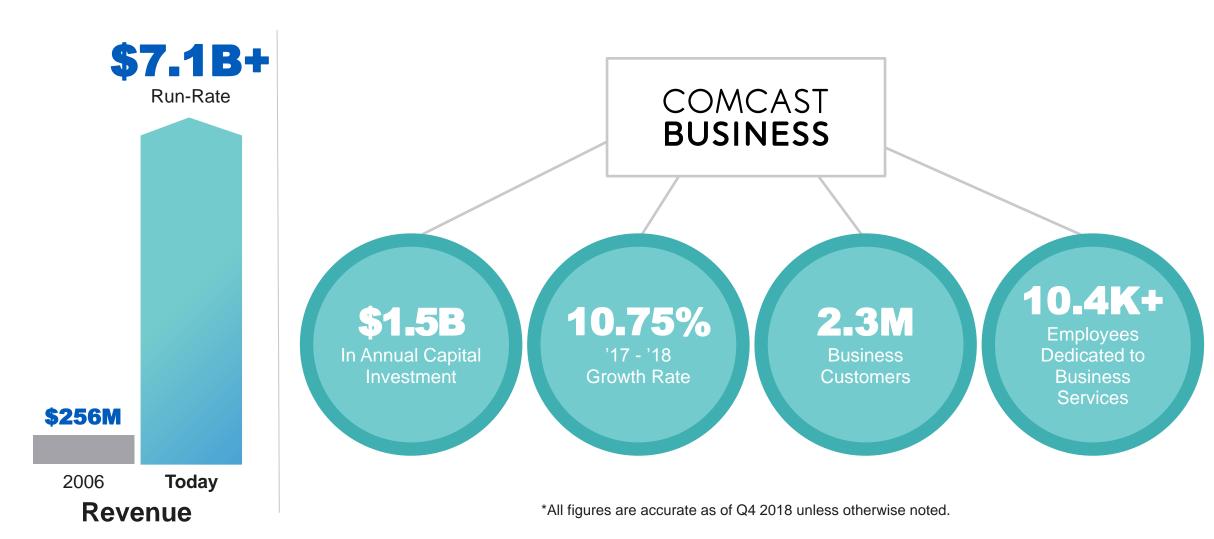


Cable-First Approach

- Fiber-rich, fiber-deep network
- Fully managed nationwide branch network solutions

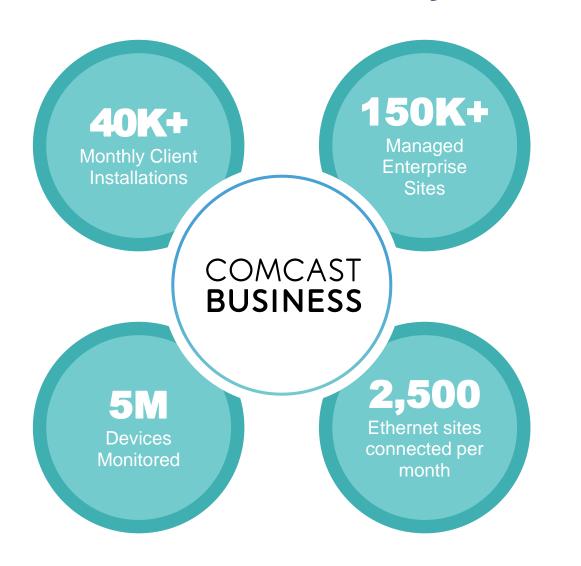
Where We Are





Comcast Business – By the Numbers





A New Internet Customer Every

16 Seconds



An Ethernet Location Installed Every

5 Minutes

Diverse Network



- Physically diverse network from telcos (routes, access points, building access, etc.)
- Largest converged IP network in the country
- Comcast continues to double its network capacity every 18 – 24 months
- Far-reaching fiber and HFC infrastructure
- Network monitoring and management 24x7x365
- Customer monitoring from redundant NOCs
- Voice SLA; 99.9% availability









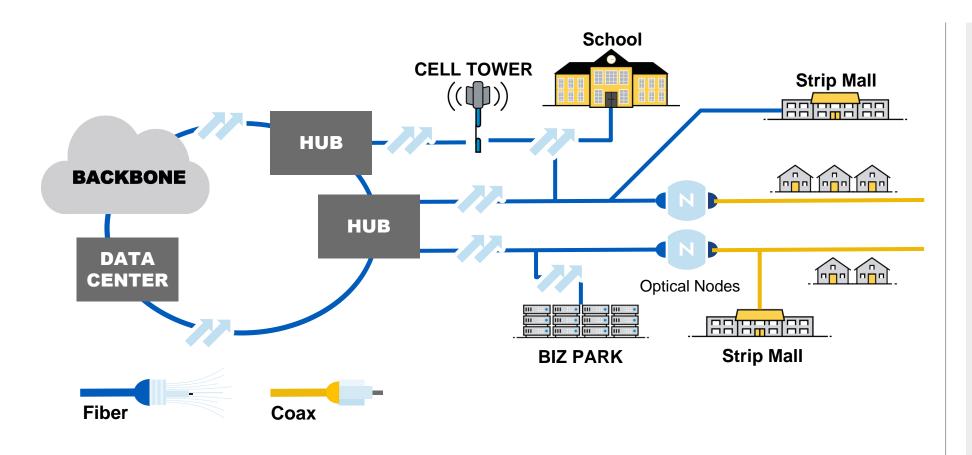




One of the largest Voice over IP provider in the nation

Best Last Mile Data Products In The World





Best = Fast, Cost-effective, Reliable, Ubiquitous

Gigabit Era has Arrived

with DOCSIS 3.1/PON

Metro-Ethernet:

Next-generation QoS underlay

- Fiber
- EoHFC

LTE Backup:

Cable-First:

Product requirements

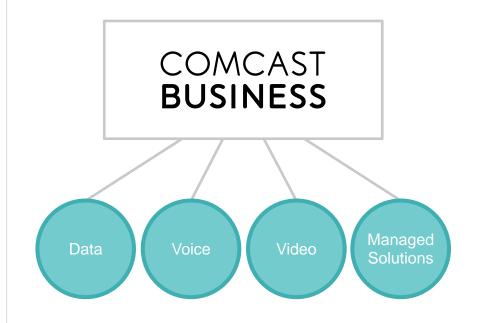
Drive off-net

Why Comcast Business



Comcast Business offers advanced technology services built for today's distributed enterprise

- Comcast Corporation is a Fortune 50 Company with financial strength and staying power
- Comcast owns the largest converged IP network in the United States
- Comcast Business will manage sites
 not on our network through our deep relationships with other providers
- Comcast Business is committed to business services and has invested billions of dollars
- Local Team-Local Presence
 you will be supported by local: sales, account management, support and leadership



Key Business Initiatives





Customer Experience

Enhance the customer experience, both in-person and online

Deliver high-quality products and services, while optimizing all available resources



Employee Engagement

Improve employee productivity, engagement and satisfaction



Expand/Grow Business

Optimize technology to drive revenue, profitability and brand loyalty



Optimize Operations

Enhance the customer experience, both in-person and online

Deliver high-quality products and services, while optimizing all available resources

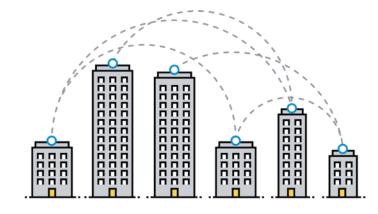
Business Trends – The Digital Transformation





The digital world is re-shaping how business works

- Enable mobility for customers, employees, partners
- Realign operations to create exceptional customer experiences
- Embrace "Cloud First" and business-critical applications



Widely distributed enterprises are expected to perform as one cohesive entity

- Provide a consistent customer experience anywhere, anytime, and on any device
- Enable employees to provide same exact services regardless of location

Companies with the top economic performance set, execute and adjust their digital strategies at a faster frequency than everyone else.

McKinsey Quarterly – January 2019

Technology Trends



Bandwidth and Speed Enable Today's Business Imperatives



Cloud, mobility, remote facilities, and IoT are driving skyrocketing bandwidth demands



Today's applications demand stability and reliable uptime



Most IT budgets can't support adequate bandwidth growth



Legacy WAN technology can be expensive, inflexible and incapable of keeping up with bandwidth demand and apps built for the internet



Traffic patterns between branches, data centers, and the internet are shifting



Customers want a digital experience that supports dynamic interaction

Business Depends on Enabling...



More Devices











More Content













More Applications













More On-Demand Access







Network Solutions

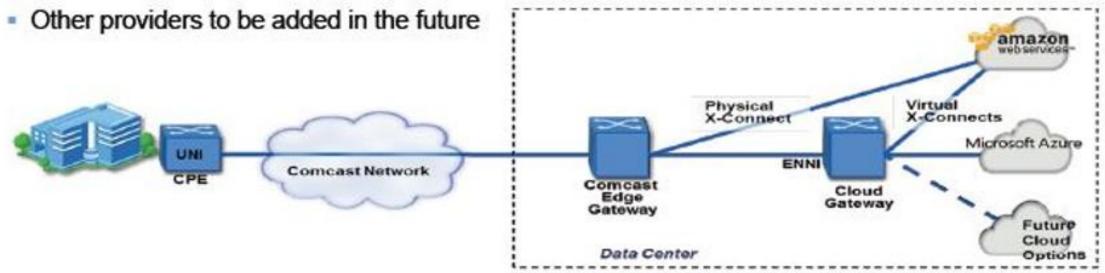


Broadband	Metro Ethernet	Managed On/Off-Net	SDN	Managed Router	DDoS Mitigation Service
Business Internet Ethernet Dedicated Internet • All business segments • National reach • Critical access of choice for SD-WAN	Ethernet – 1Mbps up to 100Gbps Managed Waves • Mid-large business • Retail and Carrier • Private cloud access • Delivered over HFC (EoHFC) or Fiber • EPL, ENS, EVPL private network	Aggregated Fiber and Broadband via Off-Net Partners • Fully managed, E2E • Single Bill • Both HFC and Fiber	Multi-VNF Design SD-WAN Orchestrated Roadmap • All business segments • National reach • Carrier-based, fully orchestrated • API driven Digital Experience. (Portal) • First of its kind Mobile App • Scaled economics (Universal Comcast Premise Equipment)	Full Lifecycle Router Management	Single Incident or Unlimited Subscription Proactively detect DDoS attack traffic Drop and rate limit traffic Divert traffic to scrubbing center Deliver clean traffic to network

Comcast Business Cloud Connect



For businesses not physically located in the same premises as CSP Comcast enables businesses to directly connect into a cloud Extends private networks to public, private or hybrid cloud solutions Connects remote sites and users to one or more cloud platforms Includes Physical and Virtual Cross-Connect options Today Comcast Supports AWS and Microsoft Azure



Comcast Business EoHFC



Ethernet delivered over Hybrid Fiber Coax

Comcast Business Ethernet over Hybrid Fiber Coax lets businesses take advantage of Ethernet technology over Comcast's far-reaching Hybrid Fiber Coax (HFC) network – An ideal solution for the more than 50% of buildings in the U.S. without Fiber.

EoHFC gives businesses:

- The ability to leverage Comcast's existing infrastructure, which means faster installs with low or no construction costs
- Service Level Agreement 99.9% uptime
- Opportunity to link smaller remote offices to bigger corporate locations because EoHFC easily integrates with fiber-based Ethernet end points
- An alternative technology at a competitive price compared to Time Division Multiplexing (TDM)

Service Speeds:

- ✓ 2 Mbps
- ✓ 4 Mbps
- ✓ 5 Mbps
- √ 6 Mbps
- √ 10 Mbps
- ✓ 20 Mbps

Service Types:

- ✓ Ethernet Dedicated Internet (EDI)
- ✓ Ethernet Private Line (EPL)
- ✓ E-Access EPL
- ✓ Ethernet Virtual Private Line (EVPL)
- Ethernet Network Service (ENS)

Comcast Business - ActiveCore SDN Platform



ActiveCore Software Defined Network Platform

Improve application and traffic management throughout the enterprise. ActiveCore's Unique SDN Orchestration Layer enables multiple virtualized services, reducing hardware, managing costs and delivering great scalability — All The Way To The Edge.

- Configure and deploy services on demand
- Virtualize and orchestrate network services
- Simplify provisioning through centralized policy management

- View and manage service components at a single site or across multiple sites easily
- Unique digital experience and single pane of glass provides ability to see, decide and act from one integrated portal
- "Point, click and deploy" replaces truck rolls and costly on-site configurations

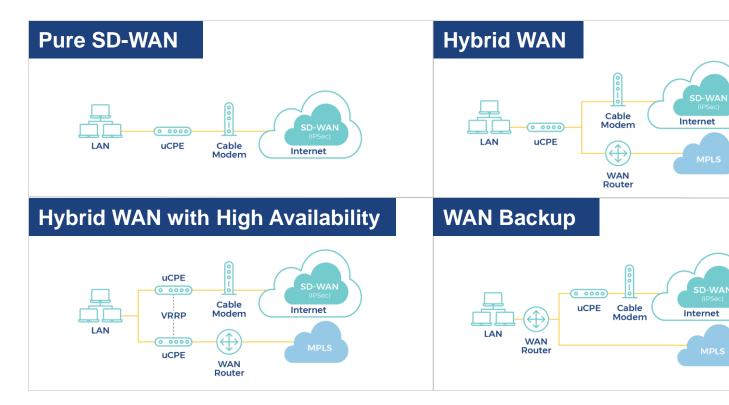
- Prioritization and traffic steering are performed at the application level
- Network management can be performed over any device
- Optimized mobile app delivers insights anytime, anywhere

Comcast Business - SD-WAN



Software Defined – Wide Area Network (SD-WAN)

With SD-WAN from Comcast Business, you will be able to cost-effectively update your existing networks across all business locations, making branch offices as capable as HQ



SD-WAN Highlights

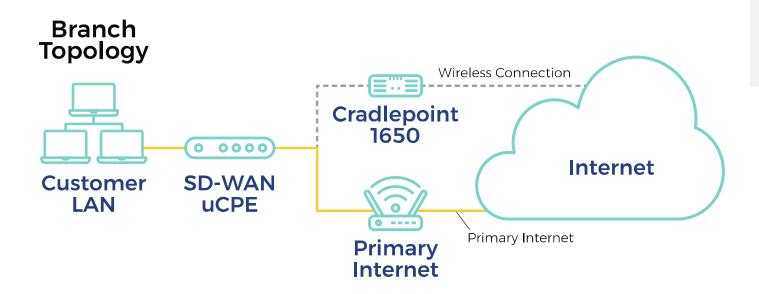
- Establish smarter network connections that deliver reliable performance, strong economics and an ability to support your evolving business
- Eliminate "vendor lock," with our open systems architecture that support SDN offerings from numerous technology providers
- Optimize IT budgets with Comcast Business SD-WAN pricing allows you to scale your bandwidth consumption
- Centrally push, manage and update policies across your business with "application-aware" capabilities that select intelligent network routes
- Update existing networks and costeffectively create new ones, giving your branch offices enterprise-grade efficiency and agility, while reducing dependence on complex MPLS technology

Comcast Business – 4G LTE Wireless Backup



ActiveCore and Connection Pro Wireless Backup

Cellular 4G LTE Wireless Backup provides continuity as needed for those unplanned disruptions to primary internet connections



Wireless Backup Highlights

- Keeps your business connected
- Ensures continuous, accurate view of your entire network

Comcast Business – Managed Router



Managed Router

As today's distributed enterprise network becomes more complex, routers have evolved to carry out a number of important tasks that keep information moving.

Managed Router Highlights

Professional Design

- Optimized network efficiency and application performance
- Network design that scales to met customers' needs
- Professional support to ensure network design and installation goes smoothly

Ongoing support as your business grows

 Support for configurations changes as customers' network needs change and grow in terms of new applications and changing performance requirements

Monitoring and Management

- 24X7X365 monitoring
- Proactive alarming and notification of potential issues
- Security updates and patches
- Firmware updates

Cost and resource efficiencies

- Equipment rental model manages costs
- Single source for connectivity and router means you won't get caught in the middle between your connectivity provider and your router provider
- Support is provided for US locations, in and out of Comcast territories
- Comcast Business is responsible for installation, maintenance and repairs of the router

Voice Solutions



Lines	Trunks	Cloud
Business Voice Managed Voice	PRI/SIP • Mid-large business	Business Voice Edge (BVE) and Voice Edge Select
 Small business / small site "POTS" line replacement Mobile app / integration New portal 	 Up to 8 PRI / Site Up to 800 concurrent calls 100+ supported PBXs DID-Level CFNR 	 Small to large business End-to-end solution Admin and User Portals Mobile app & integration Wired phones / DECT phones
Readable voicemailU.S. footprint	HFC or Fiber	 • Softphone • Conferencing Bridge (Internal+External)

100% IP/No TDM

Comcast Business Voice Solutions



Business VoiceEdge™

An ideal solution for replacing a PBX or changing your current system, allowing you to focus on your business, not your business communications

With VoiceEdge you get:

- A hosted VOIP/Unified Communications solution
- Business voice continuity features— so you don't have to miss a call even if disaster strikes
- Unlimited inbound, local and domestic long distance
- Voicemail anywhere
- Integrated business communications
- · Easy call management and feature editing
- Fully managed by Comcast Business



Comcast Business Voice Solutions



PRI Trunks

An ideal solution for use with existing PBX equipment, PRI Trunks allow you to maximize your phone capabilities. You won't require a separate line to handle each call since PRI allows multiple people to share up to 23 channels, or call paths, per PRI to communicate simultaneously

PRI Trunks provide:

- Direct inward dial (DID) and direct outward dial (DOD), eliminating the need for extensions or a receptionist to route calls
- Call detail records
- Destination unreachable so you can automatically reroute incoming calls in case of power outage or disaster
- Easy management. Add channels simply by placing a quick phone call.

Comcast Business Voice Solutions



SIP Trunks

An ideal solution to maximize voice services on existing PBX equipment. SIP Trunks are virtual voice channels, or paths, which deliver voice over an IP network to a designated end point.

SIP Trunks:

- Use SIP connectivity between your IP PBX and network, routing calls between them
- Easily manage your network and telecommunications through one provider, with one solution
- Purchase only the number of Concurrent Call Sessions needed and share them across multiple sites
- Increase by single increments as demand warrants

Security Solutions



Comcast Business SmartOffice™	DDoS Mitigation	Comcast Business SecurityEdge™
 Keep an eye on you business remotely 	 Real-time detection of DDoS and application-layer attacks 	Cloud-based blocking of internet threats
 Crystal-clear, wide-angle images Access and retrieve footage via cloud Motion insights dashboard Digital pan, tilt and zoom from cloud 	 Single-incident or Unlimited-service plans No additional premise equipment required Peace of mind and business continuity 	 Web content filtering blocks access to unwanted sites No set up or equipment required Visibility anytime, anywhere

Comcast Business – Managed Security Services



DDoS (Distributed Denial of Service) Treat Mitigation Service

Protection against DDoS and application-layer attacks, providing peace of mind and reinforcing business continuity



Detect an attack



Drop and rate limit traffic



Divert traffic to a scrubbing center



Deliver clean traffic to your network

DDoS Highlights

- Peace of Mind Size, scale, and strength of Comcast detects and mitigates attacks before disrupting business operations, providing business continuity
- Experience in Security Constantly monitors and helps protect vital network infrastructure
- High Performance at Scale Scalable solution for any attack size with little impact on network performance
- Cloud Based Requires no equipment to install or manage on premise
- Customer Support Highly responsive customer support available 24 X 7 X 365
- Flexible Flexible solution with subscription plans to meet your business needs

Comcast Business SmartOffice™



Keep an eye on your business from any location

- Record, store and share footage
- Advanced IP platform includes secure cloud storage and mobile access
- Crystal-clear, wide angle images with 1080p HD cameras
- Motion Insights dashboard
- Advanced features from the cloud: digital pan, tilt and zoom



Video Solutions



X1 for Business

- Public View for bars, restaurants, gyms, retail stores
- Private View for offices, lobbies, waiting rooms, break rooms
 - Xfinity Stream for Business live TV on up to 5 devices at your business
- Voice remote and intuitive on-screen guide

X1 for Hospitality

- Lets employees focus on serving guests instead of searching for programming
- Voice remote and on-screen guide
- On Demand programming
- 80+ HD channels
- Weather, traffic, sports apps

Video Solutions



X1 for Hospitality

Brings the unique features and personalization of the awardwinning X1 entertainment platform to hotel guests with highquality HD and voice-activated remote that create a guest experience of being connected to the comforts of home.

X1 for Hospitality:

- IP delivered service with IPTV set boxes included
- Voice-activated remote
- Pause and rewind live TV
- Free on-demand programming and Kids Zone
- 80+ HD channels
- Access to weather, traffic and sports apps



Video Solutions



X1 for Business

Brings the unique features and personalization of the award-winning X1 entertainment platform to businesses, to keep customers entertained and employees informed.

X1 for Business:

- Voice remote, on-screen Guide and search make channel navigation easier than ever
- Quality HD programming and on-screen apps
- Last 9 channels function makes it easy to access popular content

X1 for Business Public View: for bars, restaurants, gyms, retail stores

Employees can focus on serving guests instead of searching for programming

X1 Business Private View: for offices, lobbies, waiting and break rooms

 Xfinity Stream for Business brings live TV to up to 5 devices – mobile, tablet or computer – for employees and customers while at your business or in your waiting room.



An Agile and Responsive Support Team for You and Your Business



Support

- · Experienced team with thousands of dedicated professionals
- Carrier-class network engineering support experts on staff
- · Dedicated project manager
- Site survey and fiber map
- Service design review

Local Presence

- Strong local presence with customer service, customer support available 24/7/365
- · Installation at your convenience from local, certified techs

Network Management

- Ongoing multilayer, proactive monitoring and troubleshooting
- Business Network Operations Centers (BNOCs) provide redundancy and operate 24x7x365
- · Tier II and III enterprise repair groups collocated in NOCs
- Proactive Customer Monitoring Center (CMC)
- Multiple service classes backed by SLAs
- Staffed 24x7x365 certified engineers

Enterprise Support



Serving Enterprise

U.S.-based Enterprise CARE team

- Intuitive portal for instant network assessment
- Proactive monitoring

Orchestrated Service Delivery

- Dedicated program manager and project managers
- Detailed service and operation design review
- Installations scheduled on customer schedule
- Installation and testing of both infrastructure and network appliances

Excellent Customer Service

4 Fully Redundant Care Centers



Cincinnati, OH

Denver, CO

Tampa, FL

Dedicated to Enterprise customers



17 Regional Network Operations Centers Experienced technicians and engineers

24/7/365

Customer Service

Enterprise Awards Program





















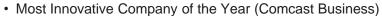














- Integration Solution (ActiveCore)
- Telecommunications Service (Business VoiceEdge)



Cloud Platform (ActiveCore)



- Business Services Innovation of the Year (ActiveCore)
- Most Innovative Tech Company (Comcast Business)



Innovation of the Year – Business Services Industry (ActiveCore)



Most Innovative Tech Company (Comcast Business)



CUSTOMER

EXPERIENCE INNOVATION

Customer Success Stories

















Comcast Business provides
Managed Broadband and Managed
WiFi for all **700+ Wawa sites**.

"We're excited to team up with Comcast to now offer WiFi in all of our stores. Customers will now enjoy the optimal environment for doing everything from utilizing their Wawa app to enjoy rewards and purchase products to connecting with their friends and neighbors."

— Carol Jensen, Chief Marketing Officer

Comcast Business selected as provider of Managed Services to Dine Brands at over 2,800+ Applebee's and IHOP Locations.

"Our partnership with Comcast Business Enterprise Services to provide the robust infrastructure needed, allows us to service our brands so they can remain focused on serving our guests and providing added value for our franchisees."

— Adrian Butler, Chief Information Officer

Press Release

Comcast Business provides Managed Broadband for all **6,000+ Taco Bell sites**, in addition to providing:

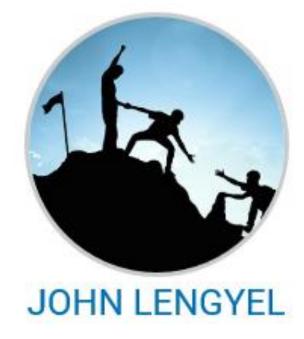
- Managed Security
- Managed Router
- Managed VPN
- Business Continuity
- Proactive monitoring and Management
- IT Deployment Services

Press Release

Press Release



Thank You!!







Pleasanton 2020: A Community Vision Representing Business & Strengthening the Local Economy

Pleasanton is widely recognized as a premier community in which to live, work and do business. The business climate is a key driver of the community's success. Pleasanton businesses generate roughly 60% of the local tax base and collectively act as the community's economic engine.

The Chamber relies on Pleasanton 2020: A Community Vision as its local public policy agenda, committing volunteer and staff time to work toward its fulfillment as a catalyst, convener and champion for all things Pleasanton!

"In short, Our strong local economy and extraordinary quality of life happen by design, not by accident. Working together, we cause great things to happen."

https://www.pleasanton.org/2020-a-community-vision

PLEASANTON RANKINGS

#4 24/7 Wall Street - America's 50
Best Cities to Live In, USA Today*

#O Money magazine's – Top Earning Towns*

#16 Nerdwallet.com - Best Cities for Young Families in Northern California*

#31 Money magazine's - Best Places to Live in America*

BRONZE Rating on League of American Bicyclists
Bicycle Friendly Communities*

