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SECURITY

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Securing Your Communications from Downtime: A Focus on VoIP

Ray Orsini: CEO, OITVOIP

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Agenda

1 Introduction

2 Understanding Risk

3 Identification and Awareness

4 Mitigation

5 Conclusion

6 Q&A

About Me

Champion for the MSP Community | Featured Speaker | Process and Procedure Advocate | Expert at VoIP Revenue Generation and Growth

Ray Orsini is a true champion of the MSP Community with a demonstrated history of leadership across the telecommunications and IT services industries.

As CEO of OITVOIP, Ray leads a team of dedicated professionals who deliver exceptional telecommunications services and guidance designed to help MSPs provide services to small businesses across the country. Skilled in negotiation, sales, service management, and team building, Ray's core focus is on enabling others to engage their clients in new and impactful ways.

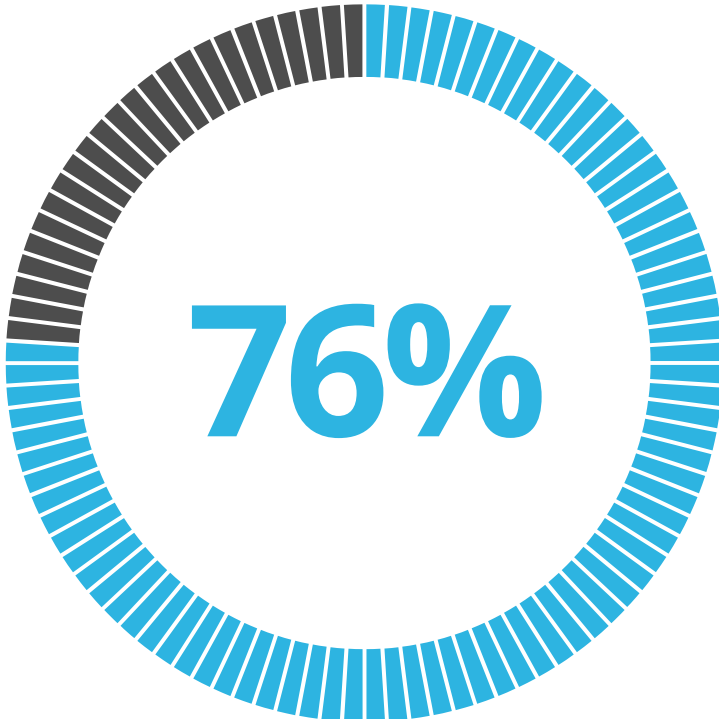
As the Founder of the MSP Media Network, Ray has set out to provide the channel with an information hub providing educational and entertaining content, news, and industry event coverage to the MSP community - including service providers and vendors.



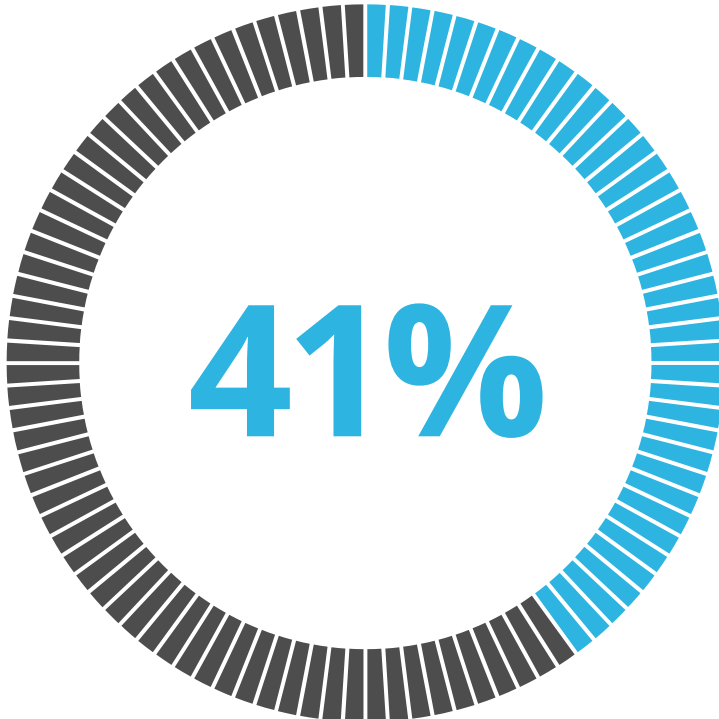
Introduction



of organizations around the world have experienced some kind of outage



endured downtime that led to data loss in 2021



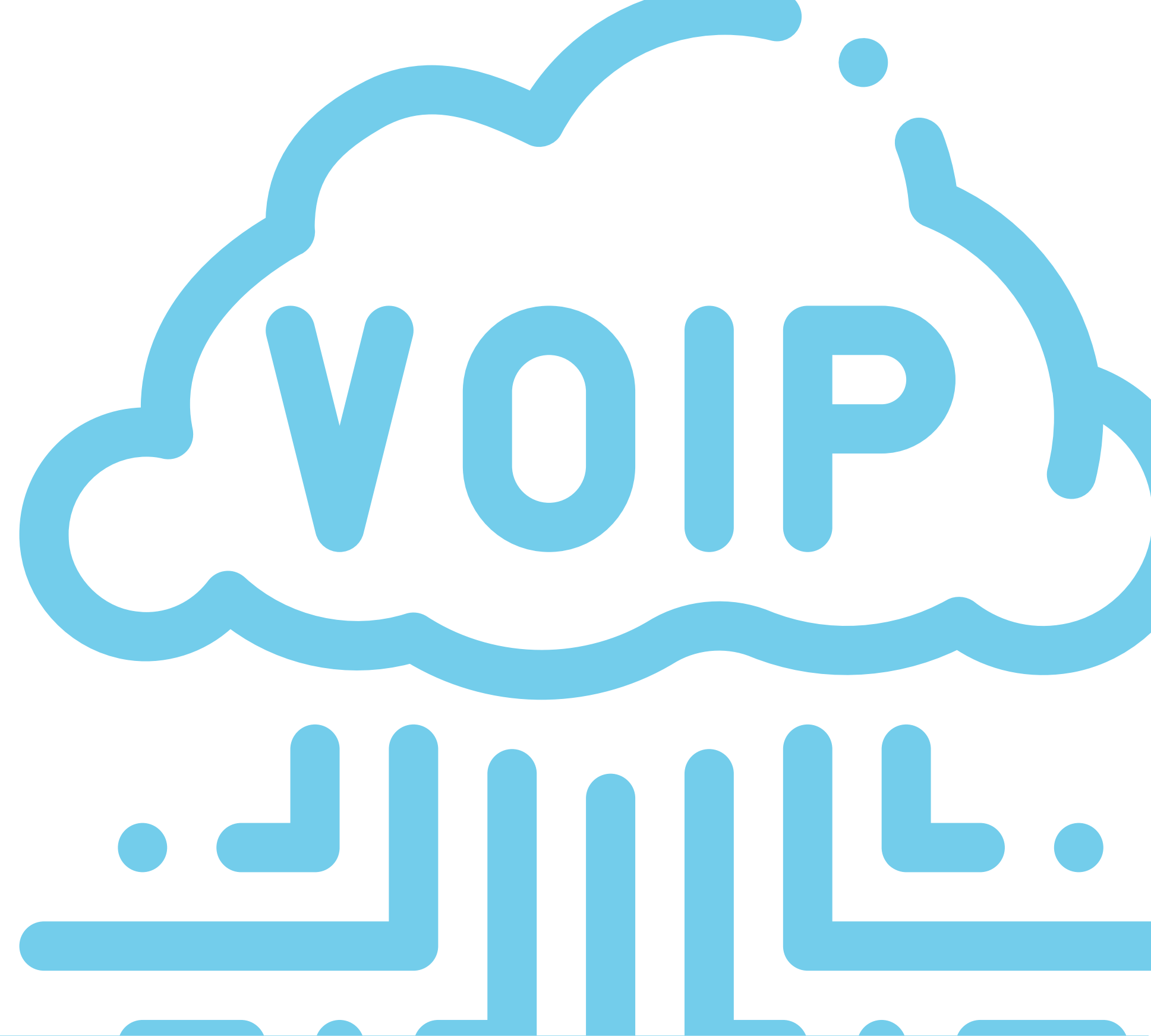
experienced unexpected recurring downtime



1 in 5 have experienced a major outage in the last 3 years that have negatively affected their reputation, revenue, and regulatory needs

Understanding VoIP

VoIP (Voice over Internet Protocol) is a technology that enables voice communication over the internet by converting analog audio signals into digital data packets and transmitting them through an IP network.



The Benefits

VoIP is considered a **future-proof** technology:

- **Scalability:** VoIP systems can easily scale up or down to accommodate the changing needs of businesses. Adding new lines or extensions is typically less complicated and more cost-effective than with traditional phone systems.
- **Flexibility and Mobility:** VoIP allows users to make and receive calls from any location with an internet connection. This flexibility is particularly beneficial for remote workers, telecommuting employees, or businesses with multiple locations.
- **Advanced Features:** VoIP offers a wide range of advanced features and functionalities that go beyond traditional phone systems. These include call forwarding, voicemail-to-email transcription, call recording, auto-attendants, and more. As technology advances, new features can be easily added to VoIP systems.

VoIP market research shows companies can save 50% to 75% on communication costs using VoIP instead of landline services. (BullsEye Telecom, 2019)

Benefits of VoIP to businesses:



Reduces Initial cost
by 90%



Reduces international
call cost by 90%

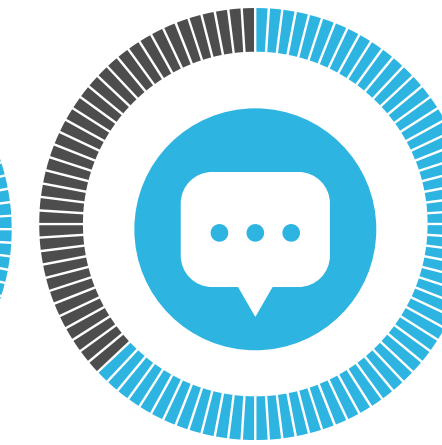


Reduces local call cost
by 40%

Benefits of VoIP according to employees:



Improves call handling
by 67%



Helps manage
messages by 63%

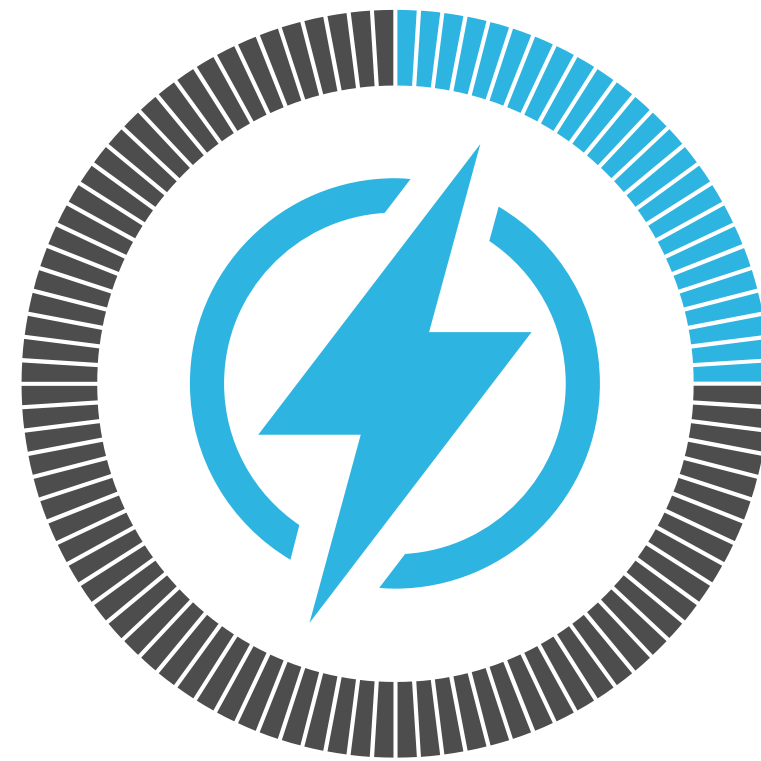


Helps w/ remote work
by 57%

Potential Causes of VoIP Outage



29% of outages are network related



25% of outages are power related



31% of outages are a result of a software or firmware failure



16% of outages result from malicious cyber-attacks (DDoS, network portioning)

The Impact of VoIP Downtime



Damage to reputation

Approximately 40% of disruptions led to brand reputation damage.



Data loss :

30% of companies experience data loss due to server outages



Loss of revenue :

Over 30% of outages resulted in direct revenue loss.

Preventing VoIP Downtime: Resilience

Set Up Redundant Network Connections and Equipment:

- Ensures business continuity by providing backup network equipment and systems.
- Reduces network failure risks, optimizes time and resources, improves network uptime, improved latency, and enhances company security.
- Allows organizations to access vital processes and information even when network components malfunction.
- Helps mitigate the impact of Distributed Denial of Service (DDoS) attacks by providing adaptable internet access and redundant networks.

Have a Disaster Recovery Plan:

- A disaster recovery plan (DRP) is a structured approach to quickly resume work after an unplanned incident and is part of a business continuity plan (BCP).
- The main objective of a DRP is to minimize the negative effects of an incident on business operations.

Preventing VoIP Downtime: Performance

- Configure **Quality of Service** (QoS) settings to prioritize VoIP traffic.
- Establish a **network topology** that's designed to properly support VoIP traffic

Preventing VoIP Downtime: Best Practices

Before:

- Redundancy and Resilience: Implement redundant systems for continuous operation.
- Regular Maintenance: Conduct inspections and maintenance proactively.
- Security Measures: Implement strong security practices.
- Testing and Training: Regularly test backups and train employees.

During:

- Incident Response Team: Establish a team to handle outages efficiently.
- Communication: Maintain effective communication channels.
- Incident Analysis: Analyze the outage to identify root causes and prevent future incidents.
- Business Continuity Planning: Have a comprehensive plan in place for outage situations.

After:

- Documentation: Record outage details, actions, resolutions, and lessons learned.
- Customer Support: Prioritize customer support and address concerns promptly.
- BCP Review: Evaluate and update the business continuity plan based on outage insights.
- Training and Awareness: Conduct training and awareness campaigns for prevention.

Conclusion

- **Preventative measures** cost less than solving problems once they've taken place.
- It's not a matter of **if**; it's a matter of **when**.
- Encourage **continuous learning** and adaptation.



Q&A

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Further Reading

- [66 Key Business Phone Systems Statistics: 2021 Market Share Analysis & Data.](https://financesonline.com/business-phone-systems-statistics-analysis-of-trends-data-and-market-share/) Finances Online. <https://financesonline.com/business-phone-systems-statistics-analysis-of-trends-data-and-market-share/>
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- [Network redundancy is the safety net of business continuity.](https://dataconomy.com/2022/08/10/network-redundancy-meaning/) Dataconomy. <https://dataconomy.com/2022/08/10/network-redundancy-meaning/>
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- [The Cost of Downtime.](https://blogs.gartner.com/andrew-lerner/2014/07/16/the-cost-of-downtime/) Gartner. <https://blogs.gartner.com/andrew-lerner/2014/07/16/the-cost-of-downtime/>
- [What Is a DDoS Attack and How Does It Work?](https://www.comptia.org/content/guides/what-is-a-ddos-attack-how-it-works) CompTIA. <https://www.comptia.org/content/guides/what-is-a-ddos-attack-how-it-works>

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