

VoIP Migration Planning Guide

Plan your migration from traditional telephony to VoIP — platform selection, number porting, network preparation, user training, and go-live procedures.

6MIGRATION
PHASES**30+**PLANNING
STEPS**Timeline**WEEK-BY-WEEK
PLAN**Free**DOWNLOAD
NO STRINGS

About This Guide

This guide provides practical, actionable advice for UK businesses. Work through each section to build a comprehensive understanding of the topic. Use the information to make informed decisions and implement best practices.

Need Help With Your IT?

Our team can help you implement the recommendations in this resource.

info@cloudswitched.com
+44 2030 043 450

New London House, 8 London St, London EC3R 7LP

1 Assessing Your Current Telephony

Before migrating, document everything about your current phone system to ensure nothing is lost in the transition.

A successful VoIP migration starts with a **thorough audit of your existing telephony**. Many businesses underestimate the complexity of their current setup, leading to missed requirements and frustrated users after migration.

- ▶ **Inventory all phone numbers:** List every DDI, hunt group number, and shared number. Include numbers used for fax, door entry, alarm systems, and lift phones. Missing a number during migration means it is unreachable.
- ▶ **Document call routing rules:** Map how calls are routed during business hours, out of hours, and on bank holidays. Include auto-attendant menus, ring groups, voicemail destinations, and call forwarding rules.
- ▶ **Identify all devices:** Count desk phones, cordless handsets, conference units, analogue devices (fax, franking machines), and headsets. Determine which can be reused and which must be replaced.
- ▶ **Assess current call volumes:** Request call statistics from your current provider showing peak concurrent calls, average call duration, and busiest times. This determines how many SIP channels you need.
- ▶ **Review current contracts:** Check contract end dates and notice periods for your current phone system, lines, and maintenance agreements. Early termination charges can be significant.
- ▶ **Identify integration points:** Document any systems integrated with your phone system — CRM call logging, contact centre software, call recording, door entry, and alarm monitoring.

BT PSTN Switch-Off

BT is switching off the traditional PSTN and ISDN network by January 2027. All businesses must migrate to VoIP or alternative digital solutions before this date. If you are still using analogue lines or ISDN, planning your migration now is essential to avoid the last-minute rush.

2 Choosing a VoIP Platform

The right platform depends on your size, requirements, budget, and existing technology ecosystem.

The UK VoIP market offers dozens of platforms ranging from basic hosted telephony to feature-rich **Unified Communications as a Service (UCaaS)** solutions. Choosing the right one requires matching features to your actual business needs.

- ▶ **Hosted VoIP vs Microsoft Teams Calling:** If you already use Microsoft 365 extensively, adding Teams Phone licences may be simpler and cheaper than a standalone VoIP platform. However, dedicated VoIP platforms often offer richer telephony features like call centre functionality.
- ▶ **Feature requirements:** List must-have features (auto-attendant, call recording, CRM integration, mobile app) versus nice-to-have features. Do not pay for a feature-rich platform if you only need basic call handling.
- ▶ **Scalability:** Choose a platform that scales easily. Adding users, numbers, and locations should be straightforward without requiring new hardware or contract renegotiation.
- ▶ **Integration capability:** Verify the platform integrates with your CRM, helpdesk, and collaboration tools. API availability is important for custom integrations.
- ▶ **Reliability and redundancy:** Ask about the provider's data centre architecture, geographic redundancy, and published uptime statistics. A provider with a single data centre is a single point of failure for your entire phone system.
- ▶ **Support quality:** Test the provider's support before signing. Call their helpdesk with a technical question and assess response time, knowledge, and helpfulness. You will need them when things go wrong.
- ▶ **Pricing model:** Most providers charge per user per month (£8-£25 per user typically). Check what is included – some bundle call minutes while others charge per minute. Factor in handset costs, number porting fees, and any setup charges.

3 Number Porting Process

Porting your existing phone numbers to the new VoIP provider is critical. Lose your numbers and you lose business.

Number porting transfers your existing telephone numbers from your current provider to your new VoIP platform. This process is **regulated by Ofcom** and should be straightforward, but it requires careful planning to avoid downtime.

- ▶ **Start the porting process early:** Number porting in the UK typically takes 7–14 working days for geographic numbers and up to 30 days for non-geographic (0800, 0345) numbers. Start the process at least 4 weeks before your planned go-live date.
- ▶ **Verify number ownership:** Ensure you have the Letter of Authority (LOA) signed by the account holder authorising the port. Incorrect or missing LOAs are the most common cause of porting delays.
- ▶ **Provide accurate details:** The losing provider will reject the port if details do not match their records exactly. Verify the account name, address, and number ranges before submitting the porting request.
- ▶ **Plan for the porting window:** Ports typically complete early morning (before 9am). Plan to have IT staff available from 7am on the porting day to verify and troubleshoot.
- ▶ **Test before the port completes:** Configure the numbers on your new VoIP platform before the port date. This way, when the numbers activate, routing is already in place and calls flow immediately.
- ▶ **Keep the old system live until porting completes:** Do not decommission your current phone system until every number has been successfully ported and tested. Overlap both systems briefly for safety.

Critical: Verify Every Number

After porting completes, call every ported number from an external phone to verify it rings correctly. Test DDIs, hunt groups, auto-attendant numbers, and any numbers used by alarm systems or door entry. A missed number could mean lost business.

4 Network Preparation

Your network must be VoIP-ready before deployment. Network issues are the number one cause of poor call quality.

VoIP is real-time communication that is **extremely sensitive to network quality**. Unlike email or web browsing, which tolerate delays, voice calls become unintelligible with even modest latency, jitter, or packet loss. Prepare your network thoroughly:

- ▶ **Create a dedicated voice VLAN:** Separate voice traffic from data traffic on its own VLAN. Configure your switches to tag voice traffic and your firewall/router to prioritise it.
- ▶ **Implement QoS end-to-end:** Configure DSCP markings for SIP signalling (CS3/26) and RTP media (EF/46) on switches, firewalls, and routers. QoS is only effective if configured consistently across every device in the path.
- ▶ **Assess bandwidth requirements:** Each concurrent G.711 call requires approximately 85 Kbps. For 20 concurrent calls, reserve at least 2 Mbps of guaranteed bandwidth for voice traffic, separate from data.
- ▶ **Verify PoE capacity:** IP desk phones are powered via PoE from network switches. Ensure your switches have sufficient PoE budget to power all phones without exceeding capacity. Budget 15–25W per phone.
- ▶ **Disable SIP ALG:** SIP Application Layer Gateway on routers and firewalls is intended to help VoIP but almost always causes problems (one-way audio, registration failures, dropped calls). Disable it on every device in the path.
- ▶ **Open required firewall ports:** SIP typically uses UDP port 5060 (or TCP/TLS 5061) and RTP uses a range of UDP ports (often 10000–20000). Open these ports to your VoIP provider's IP ranges only, not to the entire internet.
- ▶ **Run a VoIP readiness test:** Use your provider's network assessment tool or a third-party tool to measure latency, jitter, and packet loss under load. Fix any issues before deploying phones.

5 User Training Plan

Users resist change when they are not prepared. Invest in training to ensure smooth adoption and reduce support calls.

A VoIP migration changes how people use their phones every day. Even basic operations like transferring calls, checking voicemail, and dialling external numbers may work differently. **Undertrained users generate a flood of support requests** that overwhelm IT teams in the first week.

- ▶ **Create quick-reference cards:** Produce laminated cards for every desk showing how to transfer calls, set up voicemail, join conference calls, park calls, and use the most common features. Visual diagrams work better than text instructions.
- ▶ **Run hands-on training sessions:** Schedule 30-minute sessions by department in the week before go-live. Let users practise transferring calls, setting up voicemail greetings, and using the softphone app on their mobile.
- ▶ **Train reception and switchboard operators first:** These users handle the most calls and need the deepest training. Give them additional time with the system before other users and ensure they are confident with call handling.
- ▶ **Demonstrate the mobile app:** Show all users how to install and use the softphone mobile app so they can make and receive calls on their business number from anywhere. This is often the most positively received feature.
- ▶ **Provide voicemail setup instructions:** Send clear instructions for setting up voicemail greetings and PINs before go-live. Users who cannot access voicemail on day one will be frustrated.
- ▶ **Identify department champions:** Train power users in each department who can provide peer-to-peer support and answer basic questions without involving IT.
- ▶ **Plan follow-up training:** Schedule a second training session 2–4 weeks post-migration to cover advanced features and address questions that have arisen from daily use.

6 Go-Live Checklist

A structured go-live process ensures nothing is missed on the day your new phone system goes live.

The go-live day is when everything comes together. Follow this checklist to ensure a **smooth transition with minimal disruption**:

- ▶ **Verify number porting status:** Confirm with your new provider that all numbers have been ported and are active on the platform. Test every number from an external phone.
- ▶ **Test all handsets:** Verify every desk phone is registered, can make and receive calls, and displays the correct extension number and caller ID.
- ▶ **Test auto-attendant and routing:** Call your main number from an external phone and navigate every menu option to verify correct routing.
- ▶ **Verify voicemail:** Test voicemail delivery for a sample of users, including voicemail-to-email functionality if configured.
- ▶ **Test call recording:** If call recording is required, make test calls and verify recordings are captured and accessible.
- ▶ **Check emergency services (999):** Verify that dialling 999 connects correctly and that the correct address information is transmitted to the emergency operator.
- ▶ **Station IT support near users:** Have IT staff walking the floor on go-live morning to assist with any issues before users have to call the helpdesk.
- ▶ **Monitor call quality actively:** Watch the VoIP platform's call quality dashboard throughout the first day and address any quality issues immediately.
- ▶ **Keep the old system available:** Do not decommission the old phone system for at least 2 weeks after go-live. If a critical issue arises, you need the ability to fall back.