The Origins and Evolution of Asterisk PBX Software

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History of Asterisk

Asterisk began in 1999 when Auburn University student **Mark Spencer** needed a low-cost phone system for his growing Linux support business docs.asterisk.orgen.wikipedia.org. He founded a company (Linux Support Services, later renamed Digium in 2001) and wrote an open-source PBX on Linux, naming it **Asterisk** (after the "*" phone key) docs.asterisk.orgen.wikipedia.org. Spencer released Asterisk under the GPL, and it quickly attracted interest. Within months hundreds of developers worldwide were contributing features, turning Asterisk into a thriving project docs.asterisk.org. Early on, Asterisk ran only on Linux; today it supports many platforms, but its open-source roots remain central to its identity.

Asterisk **swiftly disrupted the telecom market** by giving users unprecedented flexibility. As one Sangoma engineer noted, "Asterisk swiftly emerged onto the scene and became THE open source phone system. It disrupted the traditional phone system market and gave the power back to the users" sangoma.com. By the mid-2000s, Asterisk-based business phone systems were competing with major vendors. In fact, Digium's history notes that "Asterisk-based business phone systems were the first of a new generation of VoIP-based communications products to compete with companies such as Cisco and Avaya" en.wikipedia.org. Its low cost and customizable design led to rapid adoption: by the 2010s Asterisk was used in roughly 170 countries and running on an estimated 1 million servers en.wikipedia.org. Sangoma (Digium's acquirer) later described Asterisk as "the most widely used open source communications software in the world" sangoma.com. This community and scale – now on the order of **85,000 members in 150 countries** asterisk.org – underscore Asterisk's influence in VoIP.

Digium, Switchvox, and Early Products

When LSS became **Digium** in 2001, the company focused on building products around Asterisk. Digium developed **telephony interface cards** (analog, T1/E1, BRI) to connect Asterisk servers to PSTN lines. Asterisk includes the *chan_dahdi* channel driver and the DAHDI (Digium Asterisk Hardware Device Interface) driver package for these cards asterisk.org. (In 2008 Digium formally renamed its Zaptel driver project to DAHDI for legal reasons, but it serves the same purpose.) Sangoma – which later acquired Digium – continued this hardware legacy: for example, at AstriCon 2012 Sangoma announced *three new high-density telephony boards* designed for the Asterisk community sangoma.com.

In 2007 Digium acquired **Switchvox**, an Asterisk-based IP PBX vendor for small and medium businesses lightreading.com. Switchvox provided an on-premises PBX appliance (with its own GUI) built on Asterisk. Digium's CEO Danny Windham called this "an ideal pairing of two companies committed to providing Asterisk-based telephony solutions" lightreading.com. The Switchvox product broadened Asterisk's appeal in the SMB market and later became Digium's flagship Unified Communications offering.

Also in 2007, Digium released **AsteriskNOW**, a free all-in-one software appliance. AsteriskNOW bundled Asterisk on a trimmed-down Linux (initially rPath, later CentOS) with a web-based admin GUI datamation.com. Early AsteriskNOW (v1.4) used Digium's own AsteriskGUI, but the 1.5 upgrade (late 2008) switched to Sangoma's FreePBX interface datamation.com. This made AsteriskNOW essentially a turnkey telephony distro: users could install a CentOS image that "included all

necessary Linux components built in" and a graphical UI datamation.com. AsteriskNOW helped popularize Asterisk by simplifying deployment and offering easy upgrades to newer Asterisk releases.

In the early 2010s Digium expanded beyond software. In 2012 it introduced the first **IP phones** designed specifically for Asterisk sangoma.com. These "Smart Series" phones communicated tightly with Asterisk (and Switchvox) to deliver better integration and performance sangoma.com. Digium also offered hosted and on-premises UC services (including a cloud UCaaS platform and managed PBX). By 2017 Digium's portfolio included Switchvox (cloud and on-premises), Digium IP phones, Asterisk support and licensing, and its telephony hardware channele2e.comsangoma.com. (Digium's 2017 revenues were about $30 M, reflecting its mix of open-source and commercial offerings channele2e.com.)

Major Releases and Technical Milestones

Asterisk's development has been marked by major version releases, often highlighted at AstriCon conferences. The first *stable* release (Asterisk **1.0.0**) was in September 2004, announced at the inaugural AstriCon scottstuff.net. Subsequent 1.x releases added features and hardware support. For example, **Asterisk 1.2** appeared in late 2005, and **Asterisk 1.4.0** was released on Dec. 27, 2006 with "a large number of new features over the 1.2 series" community.asterisk.org. Asterisk 1.6 followed in 2008, introducing reliability improvements and a revamped internal architecture. **Asterisk 1.8** (October 2010) was designated a Long-Term Support (LTS) release, beginning Digium's practice of LTS/Standard cycles.

In 2011 Digium shifted to year-based versioning. The **10.x** series (Oct 2011) and **11.x** LTS (Oct 2012) continued incremental enhancements. The next big jump came with **Asterisk 12** (Dec 2013) and **Asterisk 13** (Oct 2014, LTS). Asterisk 12 laid the groundwork for new features by introducing the **Asterisk REST Interface (ARI)** for external applications and a new SIP stack, PJSIP. Asterisk 13 then "polished" these changes into a production-ready LTS. Digium announced at AstriCon 2014 that **Asterisk 13** was "refined over the last year" into a "stable, feature-rich" LTS release sangoma.com. Key enhancements in 13 included the new ARI subsystem, a re-architected media bridging core, remote administration improvements, and major upgrades to the PJSIP channel driver sangoma.com. As Digium put it, "Asterisk 13 represents the most ambitious release of Asterisk yet" sangoma.com.

Subsequent releases continued evolution. Asterisk 16 (Oct 2018, LTS) and 18 (Oct 2020, LTS) built on this foundation. For example, Sangoma's notes on Asterisk 16 highlighted further **ARI usability improvements** – users can now switch between ARI applications without dropping to the dialplan sangoma.com – reflecting Sangoma's ongoing investment. (Asterisk 17 and 19 were standard releases in between the LTS versions.) Most recently, Asterisk 20 (2022) and 22 (2024) LTS versions have been released. The official Asterisk documentation tracks releases and support schedules; as of 2024 the roadmap has LTS versions (1.8, 11, 13, 16, 18, 20, 22) and annual standard releases docs.asterisk.org.

Timeline of key events:

- **1999:** Mark Spencer writes initial Asterisk code; founds Linux Support Services (LSS) docs.asterisk.orgen.wikipedia.org.
- **2001:** LSS is renamed Digium; Asterisk becomes flagship product docs.asterisk.org.
- **Sep 2004:** Asterisk 1.0.0 (first stable release) is announced at the first AstriCon conference in Atlanta scottstuff.net.
- **2007:** Digium acquires Switchvox (Oct) lightreading.com; launches AsteriskNOW distribution.
- **Dec 2006:** Asterisk 1.4.0 released community.asterisk.org, with many new features.
- **July 2008:** Asterisk 1.6.0 released (long-awaited follow-up).
- **Oct 2010:** Asterisk 1.8.0 LTS released.
- **Oct 2012:** Asterisk 11 LTS released.
- **Oct 2014:** Asterisk 13 LTS released with ARI and new media engine sangoma.com.
- **Feb 2012:** Digium debuts its first Asterisk-centric IP phones sangoma.com.
- **Oct 2018:** Asterisk 16 LTS released under Sangoma stewardship.
- **Aug 2018:** Sangoma announces acquisition of Digium en.wikipedia.org.
- **Oct 2020:** Asterisk 18 LTS released (by Sangoma).
- **Oct 2022:** Asterisk 20 LTS released; version 22 LTS released Oct 2024.

Throughout these releases, Asterisk's architecture has been continuously improved. Early versions relied on separate drivers (Zaptel/DAHDI) and Basic custom scripting (AGI/AMI). Later versions refactored the media core for better threading and modularity. The introduction of **ARI** in Asterisk 12/13 allowed developers to control calls via external REST APIs, and **PJSIP** replaced the older chan_sip driver as the modern SIP channel driver sangoma.com. Optional modules (e.g. chan_iax2, chan_skinny) were maintained or phased out over time. By the late 2010s, Asterisk had become as much a **telephony toolkit** as a PBX: it provides APIs and utilities for voice, video, conferencing, and custom call logic, enabling new applications beyond traditional call routing sangoma.comsangoma.com.

Community and Ecosystem

Asterisk's success has been driven by a global open-source community. The project's forums, mailing lists and Git repositories are active with developers and users. (In 2023 the project migrated its issue tracker, CI, and code review to GitHub, a milestone known as "the Great Asterisk Migration of 2023" sangoma.com.) Education and networking have centered on **AstriCon**, the official Asterisk conference. AstriCon began in 2004 – the same event that debuted Asterisk 1.0 – and has been held annually (in the US and Europe) ever sincelists.digium.com asterisk.org. It features technical sessions, workshops, and an expo with sponsors and vendors. Sangoma emphasizes that AstriCon is "the longest-running open source convention celebrating open source projects featuring Asterisk and FreePBX" asterisk.org. In addition to AstriCon, user-group meetups and webinars help sustain the community. The FreePBX open-source GUI (led by Sangoma) and other third-party add-ons also extend Asterisk's ecosystem, making it more accessible to non-programmers.

Open-source certifications and training (e.g. Digium/Sangoma's "Certified Asterisk" programs) have professionalized the skill set. Many third-party distributions bundle Asterisk (for example, Elastix once did; FreePBX, now part of Sangoma, is a leading Asterisk GUI). Sangoma's ecosystem (FreePBX, PBXact, switchvox) often overlaps Asterisk – for instance, PBXact is essentially a supported appliance built on Asterisk. All told, Sangoma claims Asterisk has over *85,000 community members* worldwide asterisk.org and powers millions of endpoints each year, underscoring its reach.

Business Evolution and Sangoma Acquisition

As Digium grew, it balanced open-source and commercial strategies. It offered Asterisk freely under GPL but monetized complementary products: certified hardware, support contracts, training, and premium products (Asterisk Business Edition, hosted UCaaS). This model made Digium's finances challenging. A 2018 report noted Digium revenue of **$30 million in 2017 with a modest profit margin** channele2e.com. More recurring-revenue services (cloud UC) were added, but competition was intense.

In August 2018 Sangoma Technologies (a Canadian UC hardware/software company) announced it would acquire Digium for about **$28 million** (cash and stock) en.wikipedia.org. Sangoma's CEO Bill Wignall and Digium's Mark Spencer stressed continuity: Sangoma would keep Asterisk open and continue investing in the ecosystem channele2e.comsangoma.com. The deal closed in September 2018. Sangoma then combined Digium's offerings into its portfolio: together they sell Switchvox (premise/cloud PBX), PBXact, FreePBX, Digium phones, UCaaS, and Sangoma's own telephony gateways sangoma.com. Digium's products – now "powered by Asterisk" – remained central. Sangoma highlighted that post-acquisition the merged company had "Asterisk, the most widely used open source communications software in the world, along with Sangoma's FreePBX," and a full suite of related products sangoma.com.

Digium's founder Mark Spencer commented that Sangoma "is the natural home for the Asterisk project" given both companies' long involvement, and Sangoma pledged to keep collaborating with the Asterisk community channele2e.com. Sangoma's president reiterated that Asterisk and FreePBX are "the two most widely used open source software products in the world" sangoma.com. In practice, Sangoma maintained separate engineering for Asterisk (keeping it GPL) and for its commercial offerings (like PBXact). It also retained longtime Digium staff in development roles.

Sangoma Era: Integration and Development

Under Sangoma, Asterisk development has continued steadily. New LTS releases (16, 18, 20, 22) have arrived on roughly the pre-existing schedule. For example, Asterisk 16 (Oct 2018) and 18 (Oct 2020) were announced at Sangoma-sponsored AstriCons. Sangoma continues to sponsor the AstriCon conference and to exhibit its hardware. (At AstriCon 2012, for instance, Sangoma showcased three new telephony cards for Asterisk sangoma.com, signaling ongoing hardware

innovation.) Sangoma also leverages Asterisk in its own products: Asterisk underpins FreePBX and PBXact UC systems, and Sangoma's Vega VoIP gateways are designed to integrate with Asterisk sites.

In marketing, Sangoma stresses its commitment to Asterisk's open-source roots. Press releases quote Sangoma leaders and Mark Spencer assuring users that Asterisk will remain GPL and community-driven channele2e.comsangoma.com. Sangoma's unified roadmap often mentions both Asterisk and FreePBX releases. For example, a 2019 Sangoma announcement noted "Asterisk 13 and 16 updates" with stability and ARI improvements sangoma.com, in tandem with a FreePBX upgrade. Sangoma also continues related projects (DAHDI, various Sangoma-maintained channel drivers, and convergence features like WebRTC support). Sangoma's broader strategy (including acquisitions of FreePBX's company and other tools) has made it a central steward of the Asterisk ecosystem.

Asterisk Today and Alternatives

Today Asterisk remains a **leader in open-source VoIP**. It powers a range of solutions from small business PBXs to large call centers and carriers. Thanks to its flexibility (extensive dialplan logic, APIs, wide codec and protocol support) it is used in inventive ways – for example, as a programmable voice platform for call centers, IVR systems, or telephony app development. The official Asterisk website notes staggering usage figures (85,000 community members, 11.5 million servers, 150 countries) asterisk.orgen.wikipedia.org.

However, Asterisk does face alternatives. In the proprietary space it competes with enterprise PBXs (Mitel, Cisco, Avaya) and with cloud UCaaS providers. In the open-source realm, projects like **FreeSWITCH**, **Kamailio/OpenSIPS** or commercial offerings like 3CX occupy similar niches. Industry surveys often list Asterisk (or derivative distributions) among the top open PBX platforms blog.kolmisoft.com. Sangoma cites Asterisk and FreePBX as "two most widely used open source software products" in telecom sangoma.com.

In practical terms, Asterisk's relevance endures because it is highly extensible and hardware-agnostic. Legacy telephony companies and smaller integrators still value the ability to run Asterisk on inexpensive Linux servers with Sangoma telephony cards asterisk.org. Developers appreciate the ARI interface for building new voice apps. Recent enhancements (such as multi-core media handling, built-in support for WebRTC, SIP over TLS, etc.) keep Asterisk up to date with modern telecom needs. Sangoma's continued development (including security fixes, new LTS branches, and

integrations with its product line) ensures Asterisk remains a viable foundation. As one Digium executive put it in 2018, Sangoma's backing should "reassure the Asterisk community that Sangoma is dedicated to the project," suggesting a stable outlook channele2e.com.

In summary, Asterisk's 25-year history – from a student's side project to a global open-source telecom standard – is a story of community innovation and steady corporate support. Its founding principles (open source, flexibility, low cost) still define it, and Sangoma's stewardship has preserved the open ecosystem. For VoIP professionals, Asterisk today is a mature, feature-rich toolkit. It retains a large install base and active development, even as other platforms have emerged. Its positioning as "the open-source alternative" remains strong, especially where customization and control are paramount lightreading.comsangoma.com.

Sources: Authoritative histories and press releases from Digium/Sangoma and industry outlets were consulted. These include official documentation (Digium/Sangoma blogs and PR), the Asterisk project site, and industry analysis docs.asterisk.orgdocs.asterisk.org sangoma.comen.wikipedia.org sangoma.comlightreading.com datamation.comdatamation.com sangoma.comsangoma.com en.wikipedia.orgsangoma.com, among others. Each key fact above is cited accordingly.

Tags: asterisk, pbx, open source software, telecommunications, voip, linux, software history

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About ClearlyIP

ClearlyIP Inc. — Company Profile (June 2025)

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1. Who they are

ClearlyIP is a privately-held unified-communications (UC) vendor headquartered in Appleton, Wisconsin, with additional offices in Canada and a globally distributed workforce. Founded in 2019 by veteran FreePBX/Asterisk contributors, the firm follows a "build-and-buy" growth strategy, combining in-house R&D with targeted acquisitions (e.g., the 2023 purchase of Voneto's EPlatform UCaaS). Its mission is to "design and develop the world's most respected VoIP brand" by delivering secure, modern, cloud-first communications that reduce cost and boost collaboration, while its vision focuses on unlocking the full potential of open-source VoIP for organisations of every size. The leadership team collectively brings more than 300 years of telecom experience.

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2. Product portfolio

- **Cloud Solutions** – Including *Clearly Cloud* (flagship UCaaS), **SIP Trunking**, **SendFax.to** cloud fax, **ClusterPBX OEM**, **Business Connect** managed cloud PBX, and **EPlatform** multitenant UCaaS. These provide fully hosted voice, video, chat and collaboration with 100+ features, per-seat licensing, geo-redundant PoPs, built-in call-recording and mobile/desktop apps.
- **On-Site Phone Systems** – Including CIP PBX appliances (FreePBX pre-installed), ClusterPBX Enterprise, and Business Connect (on-prem variant). These offer local survivability for compliance-sensitive sites; appliances start at 25 extensions and scale into HA clusters.
- **IP Phones & Softphones** – Including CIP SIP Desk-phone Series (CIP-25x/27x/28x), fully white-label branding kit, and *Clearly Anywhere* softphone (iOS, Android, desktop). Features zero-touch provisioning via Cloud Device Manager or FreePBX "Clearly Devices" module; Opus, HD-voice, BLF-rich colour LCDs.
- **VoIP Gateways** – Including Analog FXS/FXO models, VoIP Fail-Over Gateway, POTS Replacement (for copper sun-set), and 2-port T1/E1 digital gateway. These bridge legacy endpoints or PSTN circuits to SIP; fail-over models keep 911 active during WAN outages.
- **Emergency Alert Systems** – Including **CodeX** room-status dashboard, **Panic Button**, and **Silent Intercom**. This K-12-focused mass-notification suite integrates with CIP PBX or third-party FreePBX for Alyssa's-Law compliance.
- **Hospitality** – Including **ComXchange** PBX plus PMS integrations, hardware & software assurance plans. Replaces aging Mitel/NEC hotel PBXs; supports guest-room phones, 911 localisation, check-in/out APIs.
- **Device & System Management** – Including **Cloud Device Manager** and **Update Control (Mirror)**. Provides multi-vendor auto-provisioning, firmware management, and secure FreePBX mirror updates.
- **XCast Suite** – Including Hosted PBX, SIP trunking, carrier/call-centre solutions, SOHO plans, and XCL mobile app. Delivers value-oriented, high-volume VoIP from ClearlyIP's carrier network.

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3. Services

- **Telecom Consulting & Custom Development** – FreePBX/Asterisk architecture reviews, mergers & acquisitions diligence, bespoke application builds and Tier-3 support.
- **Regulatory Compliance** – E911 planning plus **Kari's Law**, **Ray Baum's Act** and **Alyssa's Law** solutions; automated dispatchable location tagging.
- **STIR/SHAKEN Certificate Management** – Signing services for Originating Service Providers, helping customers combat robocalling and maintain full attestation.
- **Attestation Lookup Tool** – Free web utility to identify a telephone number's service-provider code and SHAKEN attestation rating.
- **FreePBX® Training** – Three-day administrator boot camps (remote or on-site) covering installation, security hardening and troubleshooting.

- **Partner & OEM Programs** – Wholesale SIP trunk bundles, white-label device programs, and ClusterPBX OEM licensing.

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4. Executive management (June 2025)

- **CEO & Co-Founder: Tony Lewis** – Former CEO of Schmooze Com (FreePBX sponsor); drives vision, acquisitions and channel network.
- **CFO & Co-Founder: Luke Duquaine** – Ex-Sangoma software engineer; oversees finance, international operations and supply-chain.
- **CTO & Co-Founder: Bryan Walters** – Long-time Asterisk contributor; leads product security and cloud architecture.
- **Chief Revenue Officer: Preston McNair** – 25+ years in channel development at Sangoma & Hargray; owns sales, marketing and partner success.
- **Chief Hospitality Strategist: Doug Schwartz** – Former 360 Networks CEO; guides hotel vertical strategy and PMS integrations.
- **Chief Business Development Officer: Bob Webb** – 30+ years telco experience (Nsight/Cellcom); cultivates ILEC/CLEC alliances for Clearly Cloud.
- **Chief Product Officer: Corey McFadden** – Founder of Voneto; architect of EPlatform UCaaS, now shapes ClearlyIP product roadmap.
- **VP Support Services: Lorne Gaetz** (appointed Jul 2024) – Former Sangoma FreePBX lead; builds 24×7 global support organisation.
- **VP Channel Sales: Tracy Liu** (appointed Jun 2024) – Channel-program veteran; expands MSP/VAR ecosystem worldwide.

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5. Differentiators

- **Open-Source DNA:** Deep roots in the FreePBX/Asterisk community allow rapid feature releases and robust interoperability.
- **White-Label Flexibility:** Brandable phones and ClusterPBX OEM let carriers and MSPs present a fully bespoke UCaaS stack.
- **End-to-End Stack:** From hardware endpoints to cloud, gateways and compliance services, ClearlyIP owns every layer, simplifying procurement and support.
- **Education & Safety Focus:** Panic Button, CodeX and e911 tool-sets position the firm strongly in K-12 and public-sector markets.

In summary

ClearlyIP delivers a comprehensive, modular UC ecosystem—cloud, on-prem and hybrid—backed by a management team with decades of open-source telephony pedigree. Its blend of carrier-grade infrastructure, white-label flexibility and vertical-specific solutions (hospitality, education, emergency-compliance) makes it a compelling option for ITSPs, MSPs and multi-site enterprises seeking modern, secure and cost-effective communications.

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