APEX STANDARDS

IEEE 802 Working Group Contribution Analysis Platform

Whitepaper
IEEE 802 WG Analysis
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Apex Standards IEEE 802 Standardization Working Group Contribution Analysis Platform

We present a tool for searching and comparing topics across the IEEE 802 working groups, subgroups, companies, revisions, and more. It is a resource for company delegates, government agencies and policymakers, regulators, university professors, inventors, patent attorneys, and prior art searchers. Key benefits include:

Identify trends in standardization: The platform can be used to identify trends in standardization, such as which technologies are being worked on the most and which companies are making the biggest contributions. This information can be used to make informed decisions about where to invest resources and how to develop new products and services.

Track new tech developments: The platform traces contributions to emerging technologies like those in the IEEE 802.11's TGbe subgroup, which will evolve into the next-generation Wi-Fi 7 standard (IEEE 802.11be). These insights guide the strategic development of patent portfolios and R&D efforts to meet market demands.

Find information on specific topics: The platform is a comprehensive resource for information on IEEE 802 standardization. Whether you need to understand the technical details of a topic, track the history of standardization decisions, or stay up-to-date on the latest developments, this platform has it all. It streamlines preparation for IEEE meetings, informs research topic selections, and helps in developing contributions, patent drafts or papers for premier journals like IEEE and ACM.

Research within IEEE 802 & beyond: The platform offers a research basis for standards within IEEE 802 and beyond, tracking technologies like "beamforming antennas" in 802.11 (Wi-Fi), 802.15 (Specialty), and 802.18 (Regulatory), and their counterparts outside IEEE 802—in 3GPP's 5G/6G broadband standards. This knowledge informs horizontal and vertical product strategies, holistic technology adoption trends, and the competition among Standard-Setting Organizations (SSO) for new features.

Compare company and delegate contributions: The platform can be used to compare the contributions of different companies and delegates to the standardization process. Such insight can be used to identify key topics and potential collaborators, evaluate the expertise of different organizations, understand why they take certain positions, and identify opportunities for new partnerships.

To learn more, visit
www.apexstandards.com
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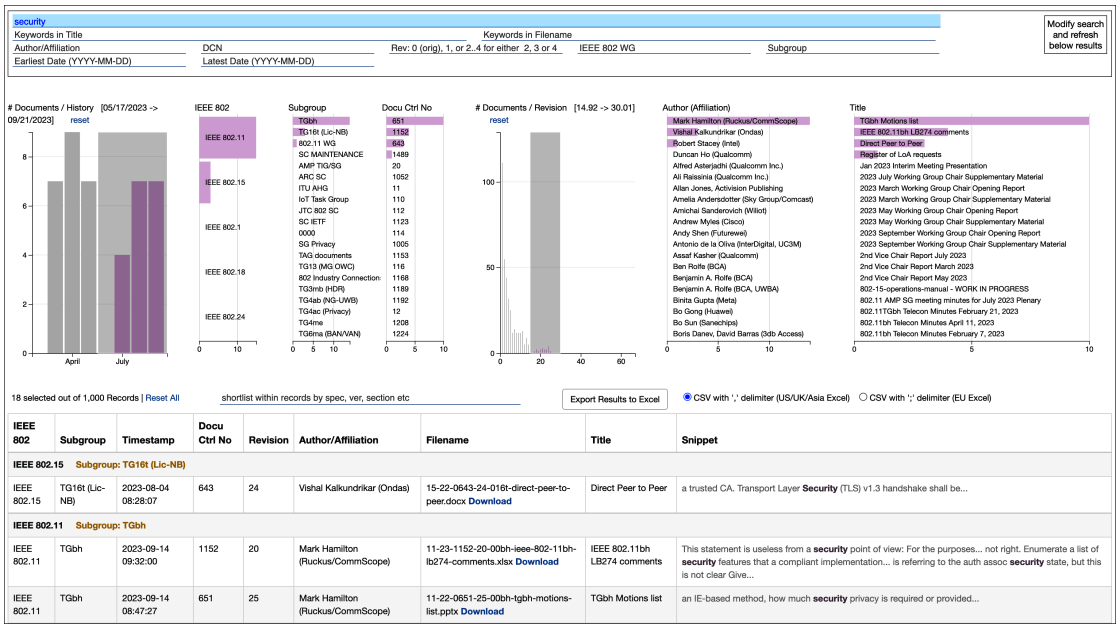

Figure 1 displays a thorough search across IEEE 802 Working Groups (WG) using "security" as a keyword. The dynamic dashboard allows adjustments, such as focusing on May to August 2023 contributions in the upper left histogram. Top responsible WGs include IEEE 802.11 and 802.15. For later-stage documents, we filter by #Doc/Rev, targeting revisions between 15-30, enabling efficient, flexible research in a few clicks. Subsequently, the table below renders insights into how various WGs or companies address the topic differently.

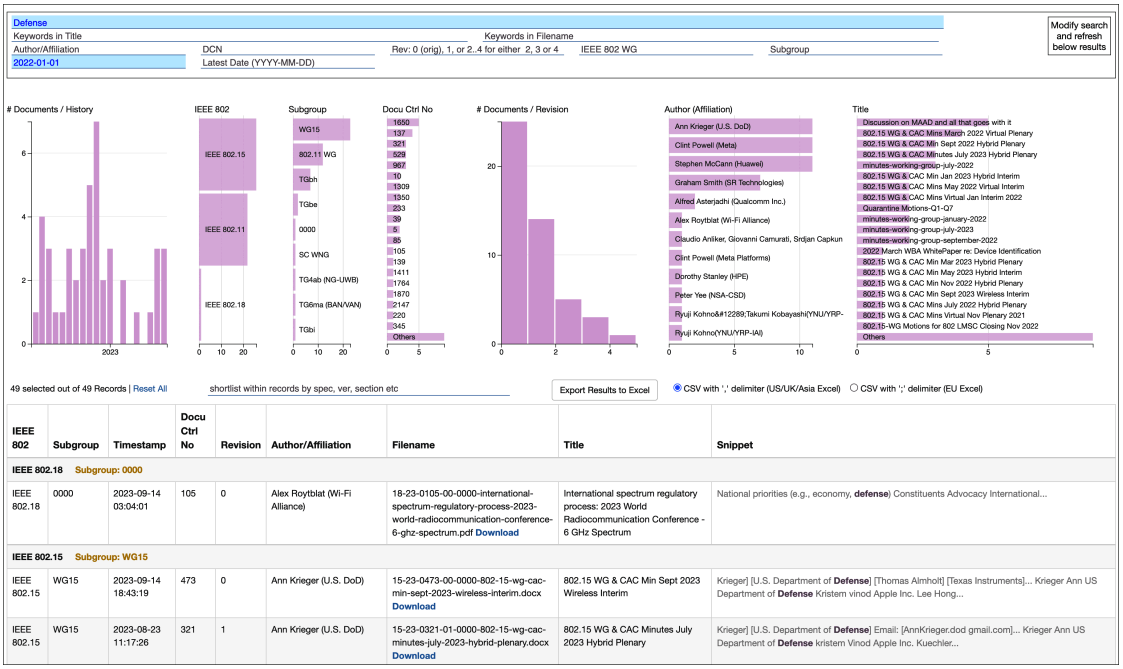

Figure 2 displays contributions with the keyword "Defense" added after Jan 1, 2022. Dominant WGs include 802.15, 802.11, and 802.19, with notable subgroups TGbh (evolving into IEEE 802.11bh) and TGbe (set for IEEE 802.11be upon maturation). Most contributions, primarily in revisions 0-5, hint at early-stage discussions. Top contributors are Ann Krieger (U.S. Dept of Defense), Clint Powell (Meta Platforms, U.S.), Stephen McCann (Huawei, China), SR Tech, and Qualcomm. Researchers can delve deeper by selecting specific WGs, authors, and more, accelerating insight extraction. When needed, they can examine the context of keywords in the "Snippet" column and download the original document for a thorough review.

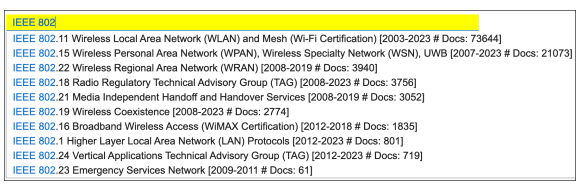

Figure 3 shows the auto-suggestion feature for active Working Groups (WG). Notable ones are 802.11 (Wireless LAN, Wi-Fi, Mesh/IoT), 802.15 (Specialty Network, WSN, Body-Area), 802.18 (Radio Regulatory), 802.19 (Wireless Coexistence), and 802.24 (Vertical Applications). This provides a clear view and enables cross-referencing of topic discussions among WGs.

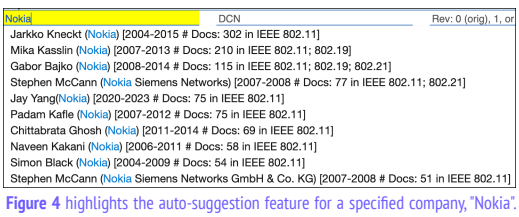

Figure 4 highlights the auto-suggestion feature for a specified company, "Nokia". Top contributors appear in a dropdown: Jarkko Kneckt leads with 302 documents in IEEE 802.11, followed by Mika Kasslin's 210 contributions in 802.11 and 802.19 from 2007-2013. Recently, Jay Yang contributed the most (75) in 802.11.