

2012.1-12



JP Domain Name Registry Report



JPRS
JAPAN REGISTRY SERVICES

Japan Registry Services Co., Ltd.

Introduction

As the Internet is being used in increasingly diverse areas of society, the need for domain names is growing and the area of domain name use is getting broader.

Against this background, the total number of registered JP domain names reached 1.3 million in August 2012.

In the same year, JPRS introduced the “Prefecture Type JP Domain Name,” a new second-level name space using the names of all the 47 prefectures in Japan, with an aim to meet the growing demand for domain names.

In the global domain name industry, 2012 marked a year of further development of the TLD space, with the progress of ICANN*1’s New gTLD Program and the launch of the applications for new gTLD strings.

On the other hand, we have also seen a number of challenges related to the Internet infrastructure, such as the spread of damage caused by malware which rewrites DNS server settings, and the vulnerability of DNS software.

As a company supporting the basis of the Internet society through JP domain names and DNS management, JPRS is striving to make the Internet safe for everyone to use. To this end, JPRS promptly provides information and deals with risks and challenges as they arise. JPRS also actively contributes to discussions of global issues and conveys relevant information to the community in Japan.

In addition to the above, JPRS is committed to its ongoing operations to improve JP domain name services, develop systems, and carry out promotional activities to facilitate the use of JP domain names and deliver greater value to users.

The management and administration of JP domain names require a high level of commitment to enhancing the public interest and encouraging sound competition. Recognizing this vital nature of its services and influence on society, JPRS annually publishes the “Registry Report” on its management and administration of .JP domain names.

JPRS will continue to ensure that JP domain names remain useful and contribute to the development of the Internet society.

Koki Higashida
President
Japan Registry Services Co., Ltd.

*1 ICANN: Internet Corporation for Assigned Names and Numbers

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01.1 Goal of JPRS as the JP Domain Name Registry

Our main objectives as the registry are: to continuously improve the value of JP domain names; to provide the registry services that contribute to society; and to gain stronger support from the local and global Internet community in an environment where JPRS competes and collaborates with other registries of Top Level Domains (TLDs) and similar services.

JPRS defines the following as the core concepts for the registration and administration of JP domain names.

- Reliability: establishing domain name space with the public trust
- Stability: operating and administering a stable domain name system (DNS)
- Usability: providing accessible domain name services which meet users' needs
- Fee Performance: providing services at reasonable fees

With the mission of supporting the foundation of the Internet, JPRS considers it important to ensure reliability and stability while pursuing a good balance with usability and fee performance.

01 · 2 Activities in 2012

JPRS has contributed to the development of the Internet society and worked to enhance its registry services and the value of JP domain names in cooperation with the JP Registrars and other related organizations.

14th ThinkQuest JAPAN (March)

JPRS supported the “14th ThinkQuest JAPAN,” a Web contest for junior and senior high school students. JPRS provided 411 General-use JP domain names (both in Japanese and ASCII) free of charge for 207 works so that they could have original domain names.

JPRS also presented the “Best Domain Naming Award” to the team who had chosen the most effective domain name to increase the appeal of their work.

Free Cartoon Booklet on the Internet System Sent to Junior and Senior High Schools and Technical Colleges across Japan (May)

“Info-Communications Promotion Month” started in mid-May as part of Internet-related educational activities. In line with this, from May 15 to June 30, JPRS set up channels including a special webpage (<http://マンガで学ぶ.jp>) where teachers at junior and senior high schools and technical colleges could apply for the graphical comic-style booklet explaining the Internet as educational material. JPRS distributed the booklet free of charge to those who applied.

Recognizing the growing importance of Internet-related education and shortage of teaching materials in schools, JPRS has worked on this project since 2010, in parallel with the “Info-Communications Promotion Month” that starts on May 15 every year. JPRS has published and offered the booklet for the third year in a row and received a number of applications from educational institutions across the nation. The number of copies distributed in total from 2010 to 2012 amounted to about 70,000.

The booklet is entitled “Ponta’s Great Adventure in the Network.” It contains a story with many illustrations to help readers learn how the Internet functions, how to reach particular websites and how the Internet address or “domain name” works. The result of the survey conducted upon distribution of the booklet revealed that many teachers appreciated receiving and using it as appropriate teaching material for Internet-related lessons.

● <http://jprs.co.jp/press/2012/120515.html> (in Japanese)



Ponta's Great Adventure
in the Network

Interop Tokyo 2012 (June)

At the conference “The Threat against DNS and Its Countermeasure,” Tomoya Sakaguchi of JPRS highlighted recent DNS security threats and measures to cope with the problems in his presentation entitled “Threats against Cache DNS Servers – Ghost Domain Names –.”

In its exhibition booth at the venue, JPRS also gave mini-seminars to visitors and provided a basic knowledge of domain names and technical information on DNS.



JRPS booth

Priority Registration Application of Prefecture Type JP Domain Name Started (July)

On July 16, 2012, JPRS started accepting applications for the Priority Registration of the Prefecture Type JP Domain Name.

The Prefecture Type JP Domain Name includes the names of the 47 prefectures in Japan, such as “〇〇〇.hokkaido.jp,” “〇〇〇.tokyo.jp” and “〇〇〇.nagasaki.jp”. These domain names help to associate homepages and email addresses with particular regions in Japan.

Prior to the launch of the General Registration service for the Prefecture Type JP Domain Name in November 2012, JPRS implemented two preliminary registration phases, Priority Registration application period and Concurrent Registration application period. This measure was taken to avoid potential problems including cybersquatting.

During the Priority Registration period, JPRS accepted applications from trademark holders for the domain name string that is the same as their trademark string.

- <http://jprs.co.jp/press/2012/120717.html> (in Japanese)

Concurrent Registration Application of the Prefecture Type JP Domain Name Launched (September)

JPRS accepted applications for the Concurrent Registration of the Prefecture Type JP Domain Name from September 17 to October 21, 2012.

The Concurrent Registration Application period is one of two preliminary registration phases, and was put in place in order to moderate competition caused by the registration on a first-come-first-served basis.

- <http://jprs.co.jp/press/2012/120918.html> (in Japanese)

Visit by Students of Nagano National College of Technology (November)

JPRS explained the role of domain names and DNS as well as JPRS’s support for “.JP” to students from the Department of Electronics and Computer Science of the Nagano National College of Technology.

Presentation at the Workshop for JP-DRP Panelists (November)

JPRS outlined the Prefecture Type JP Domain Name in its presentation entitled “Overview of the Prefecture Type JP Domain Name” at the workshop for JP-DRP panelists and other relevant parties that was held by the Japan Intellectual Property Arbitration Center.

Internet Week 2012 (November)

JPRS supported Internet Week 2012 as a sponsor and assigned Yoshiro Yoneya and Tomoya Sakaguchi to the Program Committee where they played a leading role in planning the DNSSEC Tutorial and DNS DAY. Other JPRS staff members also took part in the event by giving presentations. Masakazu Funato talked about the basics and gave an overview of DNSSEC at the DNSSEC Tutorial. Takaharu Ui, Yoshitaka Aharen, Naoki Kambe and Shoji Noguchi presented an update on domain names and DNS, BIND 10 implementation and new gTLDs at DNS DAY.

At a lunch seminar entitled “No Child Knows How Dear He Is to His Parents? Issues Concerning Delegation – Lunch with DNS –,” Yasuhiro Morishita and Satsuki Hori presented a summary of DNS delegation and the security issues that arose in 2012, and discussed the correlation between those issues and DNS delegation. At the DNSOPS.JP BoF, Kazunori Fujiwara illustrated the trends of IPv6 queries in .JP.



Internet Week 2012

General Registration of the Prefecture Type JP Domain Name Started (November)

On November 19, 2012, JPRS started accepting applications for domain names in the Prefecture Type JP Domain Name space on a first-come-first-served basis.

The domain names for which applications were received during the Priority Registration period and Concurrent Registration period (in the case of competition, the names that won) became active on November 18, 2012.

● <http://jprs.co.jp/press/2012/121119.html> (in Japanese)

6th Japan Web Grandprix (December)

The “Japan Web Grandprix,” the website awards that recognize the best corporate websites, established the “Best Domain Naming Award (JPRS Special Award)” in 2012. The “Japan Web Grandprix” is a contest founded in 2007 to promote the sound development of Japanese corporate websites, and JPRS has cooperated with the competition since 2011.

The “Best Domain Naming Award” is given to a company that selected a domain name that best promotes its website. The prize was awarded to the winner at the award ceremony held in December.

The award is intended to remind the public of the importance of domain names in corporate websites, and to encourage more effective use of domain names.

Events and Seminars for JP Registrars

May “JP Registrar Seminar – An Introduction to Domain Name Registration and Administration –” for newly accredited JP Registrars

Newly accredited JP Registrars learned about registration and administration of General-use, Organizational and Geographic Type JP domain names. JPRS also outlined general information about domain names and JP Domain Name services in the session entitled “Basics of Domain Names.”

Jun. “JPRS Technical Seminar” for JP Registrars

The session “DNS-related Hot Topics” covered topics such as ghost domain names, forewarning of an attack against root servers and countermeasures to the threat. The other session, “BIND 9 Update,” discussed the basic understanding of BIND 9, updates incorporated in BIND 9.8 and BIND 9.9, and their new functions.

Apr. “JP Registrar Seminar – An Introduction to Domain Name Registration and Administration –” for newly accredited JP Registrars

Newly accredited JP Registrars learned about registration and administration of General-use, Organizational and Geographic Type JP domain names. JPRS also outlined general information about domain names and JP Domain Name services in the session entitled “Basics of Domain Names.”

Oct. “11th JP Partners’ Meetings” for JP Registrars

JPRS held the meetings in Osaka and Tokyo and provided information on updates in the domain name industry, its service plans including future service changes and information useful for day-to-day operations. In the session “No Technical Knowledge is Necessary! Technical Description in Plain Words – How to Move your DNS servers,” JPRS presented the proper way to move DNS servers.

01 · 3 International Relations

1. Participation in ICANN

ICANN is a private non-profit organization established in the United States in 1998 to coordinate resources underpinning the Internet, such as domain names, IP addresses and root servers.

ICANN holds three public meetings each year in different regions of the world to enable global stakeholders to participate in person and discuss policies and rules for resource management. In 2012, ICANN held its 43rd meeting in San Jose, Costa Rica, the 44th meeting in Prague, Czech Republic and the 45th meeting in Toronto, Canada.



ICANN meeting in Costa Rica

With the participation of numerous parties interested in ccTLD and gTLD, ICANN has always functioned as an important forum for exchanging views and debating issues on policies and governance concerning domain name management. In recent years, ICANN has also come to play a vital role in discussions and information-sharing on technical issues including DNS and DNSSEC.

During 2012, the development of a long-term overall policy for the introduction of IDN ccTLDs continued to make progress in ICANN. And under the New gTLD Program which has attracted a great deal of public attention, ICANN started accepting applications for new gTLDs in January 2012, published a list of string applications and applicants in June 2012, and held a Prioritization Draw in December 2012 to determine the order in which new gTLDs would be delegated.

In addition, there was a change of the ICANN CEO in 2012. The new CEO, Mr. Fadi Chehadé, assumed his position in September. He indicated his intention to improve ICANN's operational excellence by bringing together its staff members in collaborative teams and running the organization based on partnerships with various stakeholders. In this light, the structural reform of ICANN is becoming a new focus of concern in the community.

Since its foundation, JPRS has been actively participating in the organization of ICANN and various policy discussions, and supporting the coordination of Internet resource management led by the private sector, with ICANN playing the central role. In 2002, JPRS signed a "ccTLD Sponsorship Agreement" with ICANN, and has since been entrusted by ICANN to serve as the registry of Japan's ccTLD*1 ".jp".

By participating in various organizations established within ICANN, as well as by conducting presentations and information exchanges at different meetings, JPRS assists in policy development and implementation-planning to cope with issues facing ICANN and registries. Also via ICANN, JPRS is sharing its experience in JP registry operations with the global community, thereby contributing to the development of the Internet as a whole.

The following reports JPRS's activities in ICANN organizations:

*1 ccTLD : Country Code Top Level Domain

(1) ccNSO

ccNSO^{*2} is one of the Supporting Organizations set up in ICANN to assist its activities. The role of ccNSO is to form a consensus in the ccTLD community on global issues concerning the entire ccTLD space and to make recommendations to the ICANN Board. JPRS has been the member of ccNSO since its inception in 2003, and Hirofumi Hotta of JPRS has served as a ccNSO Council member during the same time.

One of JPRS's achievements in ccNSO is the planning and designing of the IDN ccTLD Fast Track^{*3} Process. Since the official start of this process in November 2009, 33 IDN ccTLDs have been introduced (as of December 12, 2012).

While implementing the ccTLD Fast Track Process, ccNSO is reviewing the permanent policy for IDN ccTLDs. Major topics of the discussions included reviewing the definition of character strings allowed as IDN ccTLDs, as well as redefining ccNSO membership at the introduction of IDN ccTLDs. To study these issues, ccNSO appointed two working groups in the first half of 2010. Hirofumi Hotta of JPRS has participated in this initiative since it started as an observer in the working group that discusses the definition of character strings, and he also chairs the working group on membership definition, taking the initiative in reviews and compiling the final report.

ccNSO also discusses types and categories of TLD strings that should be recognized as representations of country and territory names. For example, it considers whether or not old country names that appeared historically should be acknowledged. ccNSO is presently conducting a survey in conjunction with UNESCO^{*4} to gather data from national administrations on the ways in which they represent their country and territory names.

Yoshiro Yoneya of JPRS also serves as a member of the project team that is defining a process to develop and maintain the Label Generation Rules for the root zone, and he is participating in the drafting and reviewing of the process document.

As a large number of TLDs are expected to be introduced under ICANN's New gTLD Program, ccNSO is intensely discussing the desirable relationships between ccTLDs—each of which has its own policies—and gTLDs. For instance, it was suggested that both ccTLDs and gTLDs apply uniform specifications and operational policies for Whois.

Regarding financial contributions by the ccTLDs to ICANN, ccNSO discusses the appropriate amounts of the contributions as well as its own membership fee. This review was initiated taking into account the fact that the other ICANN stakeholder organizations expressed discontent with the current model in which ccTLD registries could select their amounts on their own.

As for the tightening of Internet regulations, ccNSO held a series of panel discussions and called for ccNSO members to cooperate with their respective governments through information sharing and other means. ccNSO also expressed concern about the possibility that controversies similar to WCIT^{*5} may arise on various occasions.

*2 ccNSO : Country Code Names Supporting Organisation

*3 Fast Track : A method designed to enable the timely introduction of a limited number of IDN ccTLDs to meet an immediate need for ccTLDs in non-Latin scripts, while ccPDP, a policy development process for the formal launch of IDN ccTLD, is underway.

*4 UNESCO : United Nations Educational, Scientific and Cultural Organization

*5 WCIT : World Conference on International Telecommunications. A conference hosted by International Telecommunication Union (ITU), a specialized agency of the United Nations.

(2) SSAC

SSAC*⁶, one of the Advisory Committees in ICANN, advises the ICANN community and the ICANN Board on issues related to Internet security and stability. SSAC consists mainly of technical experts, such as TLD registries, registrars, root server operators, and Internet-related researchers.

Since 2007, Shinta Sato of JPRS has been participating in SSAC as a member. Using his experience of working in a ccTLD registry, Sato is committed to ensuring that the Internet operates stably at the global level.

(3) ICANN KSK Ceremony

The deployment of DNSSEC in the root zone requires that a “private key” and a “public key” be generated with public key cryptography. The procedure to create a pair of keys is generally called a key ceremony, and the procedure specifically conducted by ICANN for the root zone is called ICANN KSK Ceremony.

Root servers are an indispensable foundation of the Internet, so it must be demonstrated to the entire community that there is no fraud or errors in the generation and updating of these keys. For this reason, prior to holding key ceremonies, ICANN selected 21 TCRs (Trusted Community Representatives) to participate in the ceremonies as representatives of the global Internet community. Masato Minda of JPRS was selected as one of the TCRs and was appointed one of the COs (Crypto Officer: one of the roles played by TCR) in the ICANN’s facility on the West Coast (in Los Angeles, USA).

Minda participated in key ceremonies held in the West Coast facility in February and July 2012. The ICANN KSK Ceremony VIII was held in February and was attended by 18 participants, including Minda and three other COs. At the ceremony, the signatures for the period between April and July 2012 were created. The ICANN KSK Ceremony X was held in July and was attended by 14 participants, including five COs. The signatures for the period from October to December 2012 were generated as a result of the ceremony. The schedules, status and results of the ICANN KSK Ceremonies are posted on the ICANN website.

- <http://dns.icann.org/ksk/>

*6 SSAC : Security and Stability Advisory Committee

2. Participation in IETF

IETF*1 was established in 1986 by IAB (Internet Architecture Board) to promote standardization of Internet technologies.

There are a number of Working Groups in IETF that intend to create Internet-related standards in various technology areas.

Discussion and other activities of IETF are handled via its mailing lists. IETF also holds meetings three times per year, and these meetings are attended by engineers gathering from around the world. In 2012, IETF 83 was held in Paris, France; IETF 84 in Vancouver, Canada; and IETF 85 in Atlanta, USA.

JPRS is participating in IETF and working on revision of the protocols for the Internationalized Domain Name, internationalization of email addresses and standardization of internationalized identifier processing. The following reports JPRS's activities in IETF:

(1) Revision of Internationalized Domain Name Protocol

IDN*2 refers to domain names in Kanji, Hangeul, Arabic and other non-ASCII (alphanumeric) characters, or their technical specifications. IETF standardized the IDN protocols in 2003 and revised them in 2010.

To promote IDN, JPRS provides the internationalized domain name tool kit 2 (idnkit-2), which complies with the latest specifications revised in 2010, to the community. This tool kit offers API (library) for application developers to make software comply with the IDN specifications, as well as a set of tools for system administrators to properly process IDN.

In October 2012, JPRS released Version 2.2 with a revision to the license and compliance with Unicode 6.0.

- <http://jprs.co.jp/idn/index-e.html>

*1 IETF : Internet Engineering Task Force
 *2 IDN : Internationalized Domain Name

(2) Internationalization of Email Addresses

EAI^{*3} is a series of protocol extensions that internationalize email addresses and allow non-alphanumeric characters to be used in the addresses. EAI was standardized as a verification test protocol in the period from 2008 to 2010. Based on the results of verification tests, IETF is currently drawing up a standard protocol to be applied to practical use. In February 2012, the SMTP extension, an enhancement to the Internet Message Format, and extended delivery status and disposition notifications became the standard. Presently, standardization of POP^{*4} and IMAP^{*5} continues to progress in IETF. Kazunori Fujiwara from JPRS is proposing standard protocol specifications (RFC) for part of these protocols and actively participating in the standardization of EAI.

(3) Promotion of the Standardization of Internationalized Identifier Processing

Internationalized identifiers generally refer to identifiers consisting of non-alphanumeric characters (i.e., internationalized) that uniquely identify domain names, email addresses, and website addresses on the Internet.

To use internationalized identifiers, preprocessing is necessary to unify or normalize character types and compatible characters so that character strings can be matched up correctly. IETF issued an RFC in 2003 to propose “stringprep” as the standard method of preprocessing. Since stringprep refers to the older version of Unicode specifications, it needs to be revised.

Accordingly, in June 2010, IETF set up the PRECIS Working Group (WG) to discuss revisions to stringprep. Yoshiro Yoneya from JPRS was appointed Co-Chair of the WG to lead its activities.



IETF83

*3 EAI : Email Address Internationalization

*4 POP : Post Office Protocol. A protocol that allows a user to retrieve emails from a mail server.

*5 IMAP : Internet Message Access Protocol. A protocol that allows a user to manipulate email messages on a mail server.

3. Participation in Registry Associations

(1) APTLD

JPRS has been a member of APTLD*1 since 2002. As the registry for JP domain names, JPRS proposes improvements of APTLD activities, provides information and exchanges views at presentations and meetings so that the ccTLD community in the Asia-Pacific region can gain experience and expertise and raise the level of service standards. Yumi Ohashi of JPRS also served as an APTLD Board member from March 2002 to March 2012.

In 2012, APTLD chose new gTLDs as a key agenda. Taking that into account, Hirofumi Hotta of JPRS shared information with the other members on the applications for new gTLD strings, backend registries and the strings proposed by the ccTLD registries. In this way, JPRS contributes as an Ordinary Member to the activities of APTLD by making presentations and taking part in discussions.

As a variety of languages and scripts are used in the Asia-Pacific region, IDN is one of the important elements for promoting Internet usage. Applications for as many as 116 IDN gTLDs were received during the new gTLD application period held by ICANN, which reflected the current situation.

Under the New gTLD Program, ICANN will not approve the TLD string if it is so similar to other strings that it might create possible confusion. Until now, discussion on such points of confusion has centered on visual similarity of the TLDs. However, countries that widely use phonograms asserted that phonetic similarity should also be taken into account when judging the possibility of confusion. This led to the establishment of an APTLD Ad Hoc Working Group on transliterated TLDs, and Hirofumi Hotta from JPRS took an active role as a member of the Working Group, which drafted the report to ICANN.

(2) AP ccTLD Roundtable

On the day before the APTLD Members' Meeting in November 2012, eight major ccTLD registries from the Asia-Pacific region including JPRS gathered to share information and discuss key issues such as:

- 1) Government involvement in the management and administration of ccTLDs administered by registries; and
- 2) Contractual relationships among registries, registrars and registrants.

In the discussion on government involvement in 1), the participants shared the understanding that even though models of involvement were specific to countries and economies, each government played a certain role as a member of the community in maintaining the proper operation of the ccTLD for the country or economy in question, without intervening in the day-to-day operations of the domain.

Regarding contractual relationships in 2), it was noted that most of the ccTLDs present had contracts between registries and registrars, registrars and registrants, as well as between registries and registrants. This framework enables the registry in question to have ultimate responsibility for the ccTLD.

*1 APTLD : Asia Pacific Top Level Domain Association

(3) CENTR

CENTR*² is an association consisting of ccTLD registries mainly in Europe. As an Associate member, JPRS shares information and exchanges opinions with other CENTR members.

In 2012, JPRS participated in surveys on the requirements for registrar accreditation and customer support. JPRS also surveyed CENTR members on how their respective governments were promoting DNSSEC.

CENTR held meetings in Vienna, Austria in February and in Frankfurt, Germany in June 2012.

At the February meeting, Hirofumi Hotta of JPRS gave a presentation on the scheme and target of DNS blocking being applied in Japan to cope with child pornography, and on the status of efforts made by the Internet Content Safety Association and ISPs.

In the June meeting, Hirofumi Hotta introduced the “Prefecture Type JP Domain Name” that was created by restructuring the Geographic Type JP Domain Name with an aim to make it more user-friendly and help revitalize local communities in Japan. He also shared JPRS’s support system and measures that the staff were taking to maintain quality customer relations. Counterpart CENTR members asked JPRS many questions about the sales staff of JP Registrars since the sales representatives of each registrar are not very commonly known to them.

*2 CENTR: Council of European National Top Level Domain Registries

4. Other International Activities

(1) Submission of Comments to ITU in Response to Notice of Inquiry

JPRS submitted its comments in response to a solicitation for opinions by the ITU *1. The ITU called for public comments with regards to the “Draft of the Future of ITR*2”, a compilation of proposed amendments to ITRs, or any other matter related to WCIT.

In its comments, JPRS pointed out that the speed of the growth and development of the Internet had relied on a framework based on the open and bottom-up multistakeholder model of governance. JPRS also expressed its hopes that ITRs and WCIT would not adversely affect that original framework of the Internet.

● <http://jprs.co.jp/en/topics/2012/121105.html>

(2) Participation in the DotAsia Organisation

The DotAsia Organisation is the sponsoring organization and registry for the “.asia” top level domain. It is a not-for-profit organization incorporated in Hong Kong and contributes its proceeds of the .asia registration services toward promoting the Internet in the Asia-Pacific region by carrying out various community projects.

The DotAsia Organisation’s Internet advancement initiatives include: the Secretariat of Asia Pacific Regional Internet Governance Forum (APrIGF) and the Asia Pacific Next Generation (APNG) Camp, capacity building of the younger generation through the “NetMission Ambassadors Program” and promotion of the “One-Laptop-Per-Child” movement in the Asia-Pacific region.

JPRS has participated in the DotAsia Organisation as a Sponsor Member since its foundation, and Atsushi Endo of JPRS plays a role in its organizational operation as one of the Board Directors.

(3) Participation in Root DNS Server Operator Organizations’ Meetings

IETF holds meetings three times a year, and representatives of root DNS server operator organizations meet on the first day of each meeting. JPRS has been participating in these meetings as one of the organizations in charge of M-Root DNS server operations. At these meetings, attendees share information principally on the stability of server operations and topics related to the latest technology.

In 2012, the participants discussed a method of simultaneous data collection at root server instances and ways to continue stable operation of the root DNS servers after the introduction of the new gTLDs.

*1 ITU : International Telecommunication Union
 *2 ITR : International Telecommunication Regulations

(4) Participation in the BIND 10 Development Project

BIND is the DNS server software most widely used on the Internet. In April 2009, ISC*3, a non-profit organization in the United States, announced a plan to improve the security and robustness of this software and set up a project to develop the next-generation BIND 10. JPRS supports the objectives of this project and participates in it as one of the Founding members.

This project is sponsored by many TLD registries around the world, including JPRS, CIRA (.ca) and DENIC (.de).

Since the outset of the project, JPRS has been offering not only financial support but also human resources, assigning its engineers, Kazunori Fujiwara, Naoki Kambe and Yoshitaka Aharen to the development team. In 2012, the project accomplished Alpha, Alpha 2 and Beta releases of the authoritative DNS server, and ISC started seeking testers from the community. JPRS began field tests of BIND 10 and is providing feedback about detected problems and proposed improvements to the development team.

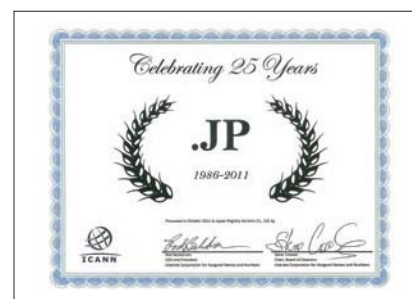
(5) Activities in Academic Societies

JPRS is conducting ongoing research on DNS. In 2012, Takeshi Mitamura and Kazunori Fujiwara of JPRS submitted their findings to the international societies, "SAINT 12"*4 and "ICDM 2012"*5, respectively. Both of their papers were accepted and they presented them at each conference.

- Paper presented at "SAINT 12"
Title: "DNS traffic analysis -- Issues of IPv6 and CDN --"
Authors: Kazunori Fujiwara, Akira Sato and Kenichi Yoshida
- Paper presented at "ICDM 2012"
Title: "Viewers' side analysis of social interests"
Authors: Takeshi Mitamura and Kenichi Yoshida

(6) Certificate Granted in Commemoration of 25th Anniversary of .JP

In March, ICANN granted a silver anniversary certificate to the TLDs including .JP that commemorated their 25th anniversary in 2012. .JP received ICANN's recognition for its 25 years of continuous and stable operation since its initial delegation to Mr. Jun Murai in 1986 up to the present date when JPRS now serves as the delegate. The certificate was given to each of the 27 TLD managers that started operation between 1985 and 1987.



Certificate celebrating the 25th anniversary of the TLD

*3 ISC : Internet Systems Consortium, Inc.

*4 SAINT 12 : The 12th IEEE/IPSJ International Symposium on Applications and the Internet

*5 ICDM 2012 : The IEEE International Conference on Data Mining

01 · 4 Activities in Japan

(1) Participation in the JAPAN Network Operators' Group

The JAPAN Network Operators' Group (JANOG) is the organization established to promote the smooth operation of networks through discussions and information-sharing among network operators to contribute to Internet users and engineers. The members discuss various issues on a mailing list and gather at JANOG meetings held twice a year.



JANOG29 Meeting

In 2012, the JANOG Meetings were held in January and July. For the January meeting, JPRS supported JANOG as one of the sponsors and assigned Ryosuke Sekido to assist in the meeting arrangements as a member of the Steering Committee.

At the JANOG29 Meeting held in January, Masato Minda of JPRS gave a presentation entitled "Are AAAA Filtering and DNSSEC*1 Compatible?" and introduced a study on the impact of DNSSEC validation implemented by applications enabled with the option to filter AAAA records of BIND 9.

The JANOG30 Meeting held in July marked a milestone of 30 meetings and the 15th anniversary of JANOG. In commemoration, the meeting schedule for JANOG30 was extended from the usual two days to three days, and a "Celebration of JANOG's 15th Anniversary Event" was held on July 4th, the first day of the conference.

JPRS published the progress of these JANOG Meetings as part of the "Report on Domain Name Related Meetings" available on its website.

- <http://jprs.jp/related-info/event/2012/0119JANOG.html> (in Japanese)
- <http://jprs.jp/related-info/event/2012/0803JANOG.html> (in Japanese)

(2) Participation in the DNS Operators Group, Japan

The DNS Operators Group (DNSOPS.JP) was established in 2006 with the intention of contributing to the stable operation of the Internet through the administration of DNS. Yasuhiro Morishita of JPRS participated in the establishment as one of the founding members. DNSOPS.JP serves as a forum where DNS operators can exchange and share information and discuss related issues.

At the "DNS Summer Days 2012" held from August 31 to September 1, JPRS gave tutorials with an overview of DNS. Tomoya Sakaguchi of JPRS shared an update of BIND 9, and Yasuhiro Morishita summarized DNS delegation in a session entitled "Various Issues Surrounding Delegation."

*1 DNSSEC: DNS Security Extension

(3) Participation in DNSSEC Japan

DNSSEC Japan was founded in 2009 to introduce and disseminate DNSSEC smoothly in Japan, and it subsequently handed over its achievements to the DNS Operators Group (DNSOPS.JP) in March 2012. JPRS actively participated in DNSSEC Japan as a member and the Secretariat, with Yoshiro Yoneya of JPRS serving as Vice Chair.



DNSSEC Ready Logo

In 2012, the Operational Technology Working Group of DNSSEC Japan studied cases of failure seen in organizations that were early adopters of DNSSEC and published its report.

The Logo Working Group developed and published the DNSSEC Ready Logo and DNSSEC Ready Checklist that could be used by organizations to indicate that their services or products were DNSSEC aware. The results of their activities are posted on the DNSSEC Japan website.

In the “DNSSEC 2012 Spring Forum” held by DNSSEC Japan in April 2012, JPRS staff members gave presentations and shared updates. Shinta Sato talked about the deployment of DNSSEC for the root zone and .JP. Yoshitaka Aharen provided an overview of DNS and DNSSEC. At the DNSOPS.JP BoF, Yasuhiro Morishita explained “ghost domain names,” a vulnerability which had been warned of in February 2012.

- <http://dnssec.jp/> (in Japanese)

(4) Participation in ICANN Debriefing Sessions

Since 2001, JPRS has been reporting the latest ccTLD trends to the Japanese Internet community at ICANN Debriefing Sessions held jointly by the Japan Network Information Center (JPNIC) and Internet Association Japan (IAJapan).

In 2012, the sessions were held in May, July and November. Hirofumi Hotta and Yuri Takamatsu of JPRS reported on issues concerning IDN ccTLDs and other subjects considered in ccNSO and discussed ICANN-related issues with the other attendees.

(5) Participation in IETF Reporting Session

In 2012, ISOC-JP held the IETF Reporting Session in December. Kazunori Fujiwara of JPRS gave a presentation entitled “Report of IETF 85 – DNS and Internationalization –” and reported on the status of the working groups concerned with DNS and internationalized email addresses.

01.5 Overview of this Term's Activities and Challenges for the Future

JPRS has constantly worked to strike a proper balance among reliability, stability, usability, and fee performance, which constitute the basis of JP domain name registry services, while also improving each of the four values.

To respond to expanding needs and enhance the usability of the JP Domain Name, JPRS has considered measures to make Geographic Type JP Domain Name more user-friendly. As a result, it introduced "Prefecture Type JP Domain Name," a domain name space using the names of the 47 prefectures in Japan, in 2012. As of the end of December 2012, one month after the start of the General Registration, more than 8,000 domain names were registered. This number of registrations largely exceeded that of the Geographic Type JP Domain Name.

JPRS, as the JP domain name registry, conducted activities to disseminate information and promote understanding of domain names and DNS. At the international level, it continued its participation in the policy development for the introduction of IDN ccTLDs. JPRS also contributed actively to the standardization of protocols by proposing RFCs for email address internationalization.

As part of its Internet-related educational support activities, JPRS has distributed a free booklet on how the Internet works to educational institutions across Japan for three years in a row. For a Web contest for junior and senior high school students, JPRS provided free JP domain names and presented the "Best Domain Naming Award (JPRS Special Award)"

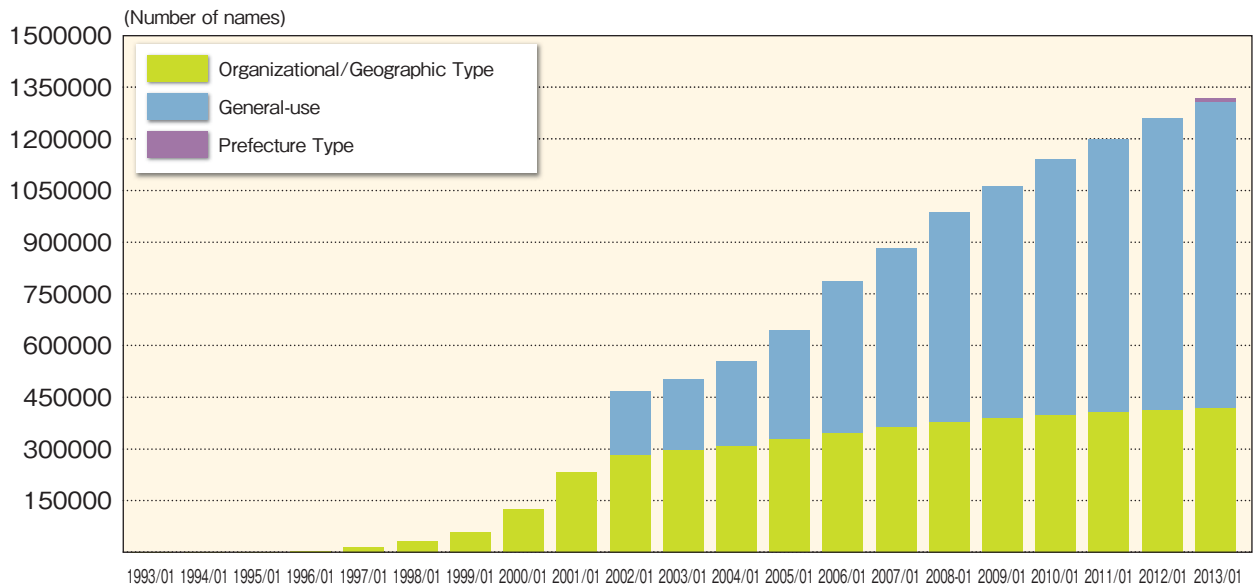
The Great East Japan Earthquake that occurred in 2011 has added further weight to need for the reliability and stability of the Internet infrastructure. Against this backdrop, JPRS reviewed the number of servers and the network architecture for JP domain name services in 2012 to ensure the stability of the domain name system and continuity of services in the event of a disaster.

For the future, JPRS plans to further reinforce and implement the disaster service structure. One of the challenges is to readjust the balance between publication of the JP domain name registration data through Whois, which is required from the viewpoint of autonomous, distributed and cooperative systems of the Internet, and the protection of personal information, which is demanded especially in the case of domain name registrations by individuals. This issue is under discussion in the JP Domain Name Advisory Committee.

As the registry of JP domain names, JPRS will continue its efforts to provide better and stable services.

02.1 Change in the Cumulative Number of Registered JP Domain Names

As of January 1, 2013, the cumulative number of registered JP domain names reached 1,318,715, an increase of 60,329 in one year.



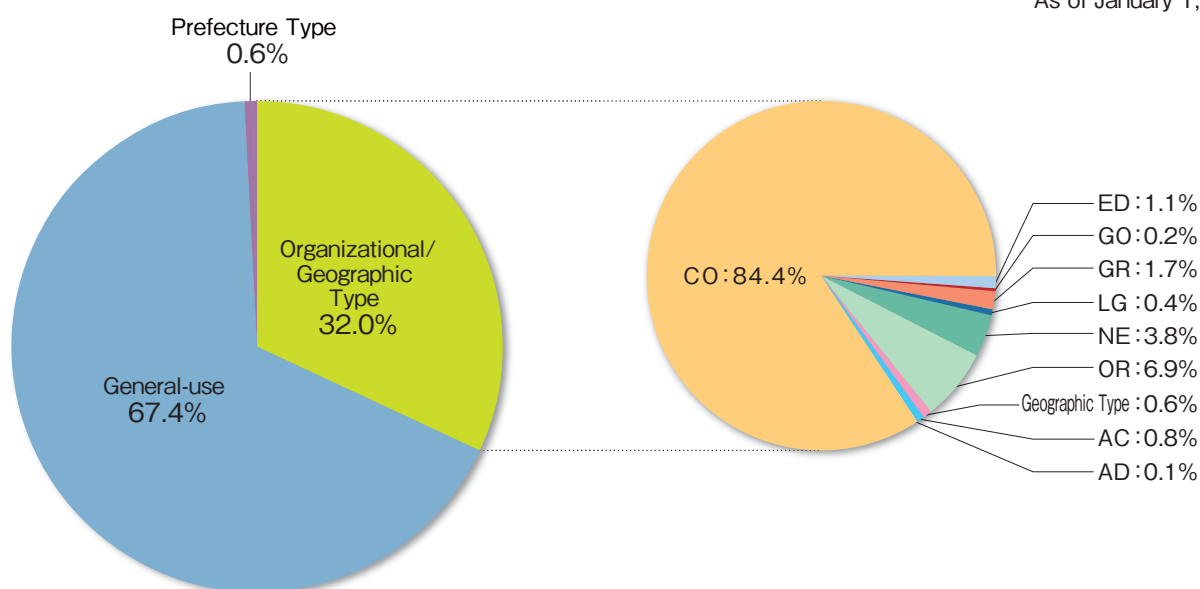
(Number of names)

Year/ Month	Organizational/Geographic Type	General-use (Japanese domain name)	Prefecture Type (Japanese domain name)	Total
1993/01	953	—	—	953
1994/01	1,341	—	—	1,341
1995/01	2,206	—	—	2,206
1996/01	4,781	—	—	4,781
1997/01	15,477	—	—	15,477
1998/01	33,739	—	—	33,739
1999/01	58,549	—	—	58,549
2000/01	124,573	—	—	124,573
2001/01	234,294	—	—	234,294
2002/01	283,340	183,499 (61,507)	—	466,839
2003/01	297,413	205,493 (51,544)	—	502,906
2004/01	309,193	245,100 (45,402)	—	554,293
2005/01	327,742	317,455 (63,324)	—	645,197
2006/01	346,340	439,784 (116,602)	—	786,124
2007/01	363,768	518,557 (124,153)	—	882,325
2008/01	378,903	609,983 (141,858)	—	988,886
2009/01	389,598	674,133 (134,921)	—	1,063,731
2010/01	399,339	740,820 (133,754)	—	1,140,159
2011/01	406,856	791,249 (123,711)	—	1,198,105
2012/01	413,332	845,054 (119,337)	—	1,258,386
2013/01	421,606	888,657 (122,394)	8,452 (1,915)	1,318,715

*Please refer to "Domain Name Statistics" (<http://jprs.co.jp/en/stat/>) for the latest information.

02.2 Breakdown of the Cumulative Number of Registered JP Domain Names

*As of January 1, 2013



(Number of names)

JP Domain Name Types		1 Jan 2013 Number of Registrations	1 Jan 2013 Number of Registrations	Difference
Organizational/ Geographic Type	AC: Higher education institution	3,537	3,530	+7
	AD: JPNIC Member	268	273	-5
	CO: Company	355,942	347,999	+7,943
	ED: Primary school, junior and senior high school	4,777	4,692	+85
	GO: Japanese government	656	739	-83
	GR: Group	7,281	7,428	-147
	LG: Japanese local authority	1,836	1,842	-6
	NE: Network service	15,820	16,345	-525
	OR: Judicial body other than company	28,948	27,890	+1,058
	Geographic Type	2,541	2,594	-53
General-use (Japanese domain name)		888,657 (122,394)	845,054 (119,337)	+43,603 (+3,057)
Prefecture Type (Japanese domain name)		8,452 (1,915)	—	+8,452 (+1,915)
Total JP Domain Name Registration		1,318,715	1,258,386	+60,329

*Please refer to "Domain Name Statistics" (<http://jprs.co.jp/en/stat/>) for the latest information.

02.3

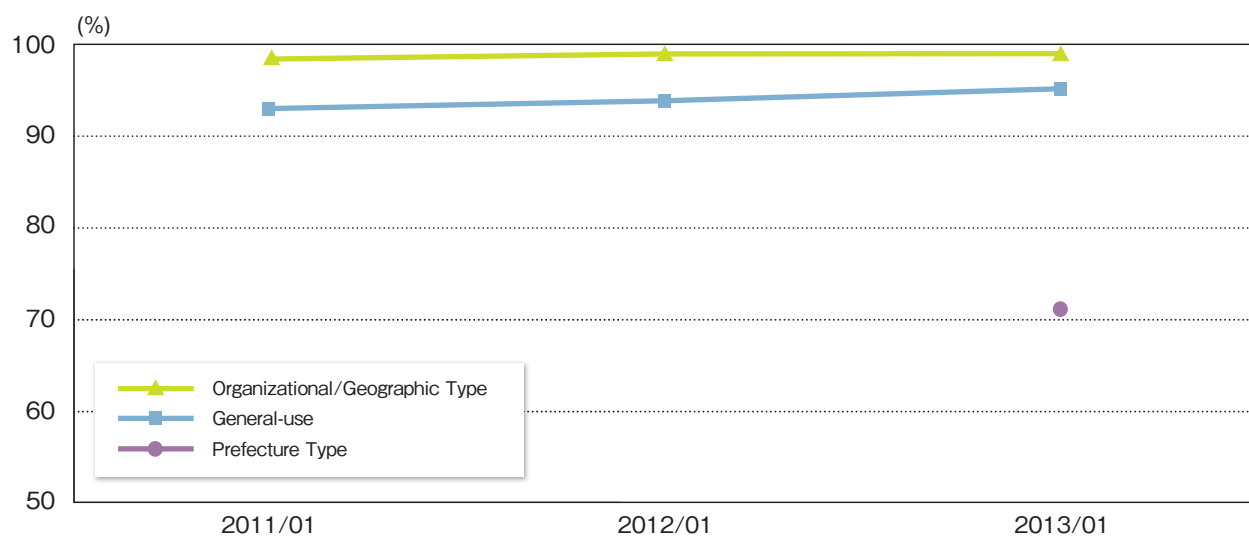
Number of JP Domain Name Registrations
by Prefecture

*As of January 1, 2013

Prefecture	Organizational/ Geographic Type	General-use	Prefecture Type
Hokkaido	2.8%	2.1%	1.9%
Aomori	0.5%	0.3%	0.2%
Iwate	0.4%	0.3%	0.2%
Miyagi	1.3%	0.8%	0.3%
Akita	0.4%	0.2%	0.1%
Yamagata	0.6%	0.3%	0.2%
Fukushima	0.8%	0.4%	0.3%
Ibaraki	1.4%	1.0%	0.3%
Tochigi	1.0%	0.5%	0.2%
Gunma	1.1%	0.7%	2.1%
Saitama	4.2%	2.8%	2.8%
Chiba	3.1%	2.5%	2.4%
Tokyo	32.7%	44.1%	42.8%
Kanagawa	6.7%	5.3%	3.0%
Niigata	1.2%	0.7%	0.4%
Toyama	0.7%	0.4%	0.8%
Ishikawa	0.7%	0.5%	0.3%
Fukui	0.5%	0.4%	0.1%
Yamanashi	0.5%	0.4%	0.1%
Nagano	1.4%	0.9%	0.6%
Gifu	1.2%	0.7%	0.3%
Shizuoka	2.3%	1.7%	0.7%
Aichi	5.5%	3.6%	2.0%
Mie	0.8%	0.6%	0.4%
Shiga	0.6%	0.5%	1.0%
Kyoto	2.1%	2.7%	6.1%
Osaka	9.6%	12.7%	14.8%
Hyogo	3.1%	2.5%	2.5%
Nara	0.6%	0.5%	0.7%
Wakayama	0.4%	0.3%	0.1%
Tottori	0.2%	0.2%	0.0%
Shimane	0.3%	0.2%	0.0%
Okayama	1.1%	0.8%	0.4%
Hiroshima	1.6%	1.1%	1.8%
Yamaguchi	0.5%	0.3%	0.3%
Tokushima	0.3%	0.3%	0.0%
Kagawa	0.5%	0.4%	0.2%
Ehime	0.6%	0.5%	0.3%
Kochi	0.3%	0.2%	0.1%
Fukuoka	3.0%	2.8%	5.7%
Saga	0.3%	0.2%	0.1%
Nagasaki	0.5%	0.4%	0.1%
Kumamoto	0.7%	0.6%	0.2%
Oita	0.4%	0.4%	0.3%
Miyazaki	0.4%	0.4%	0.2%
Kagoshima	0.5%	0.4%	1.4%
Okinawa	0.6%	0.6%	0.9%

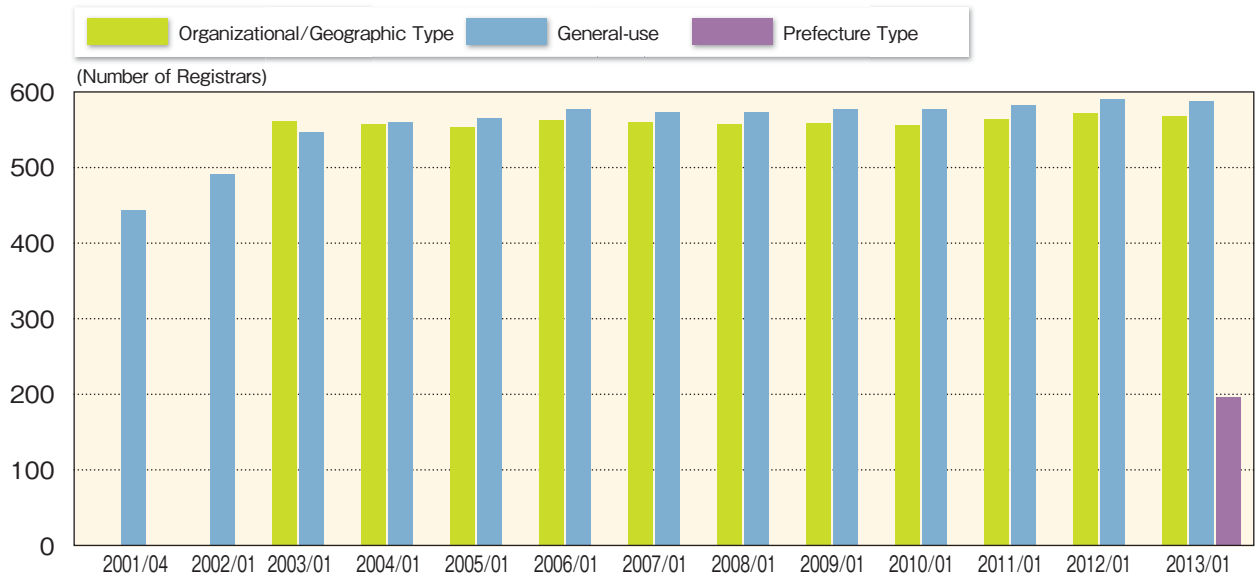
02·4 Transition of DNS Configuration Rate

*As of January 1, 2013



Year/Month	Organizational/Geographic Type	General-use	Prefecture Type
2011/01	98.7%	93.1%	—
2012/01	98.9%	93.9%	—
2013/01	99.0%	95.3%	71.0%

02.5 Number of Accredited JP Registrars



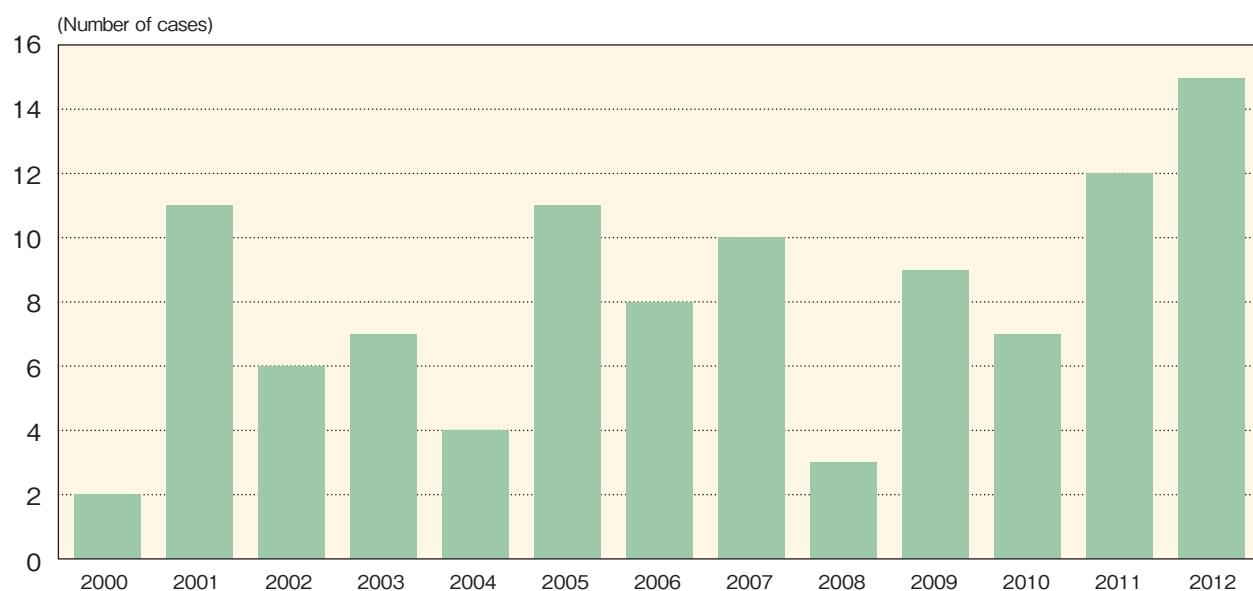
(Number of Registrars)

Year/ Month	Organizational/Geographic Type	General-use	Prefecture Type	Total
2001/04	—	443	—	443
2002/01	—	490	—	490
2003/01	560	546	—	1,106
2004/01	557	559	—	1,116
2005/01	553	564	—	1,117
2006/01	562	576	—	1,138
2007/01	559	572	—	1,131
2008/01	557	573	—	1,130
2009/01	558	577	—	1,135
2010/01	555	577	—	1,132
2011/01	563	582	—	1,145
2012/01	571	590	—	1,161
2013/01	566	586	197	1,349

*The number of JP Registrars for the Organizational/Geographic Type JP domain names is the figure after April 2002 when management and administration was transferred from JPNIC to JPRS.

02.6

Number of Complaints Based on JP Domain Name Dispute Resolution Policy (JP-DRP)



(Number of cases)

Year	Number
2000	2
2001	11
2002	6
2003	7
2004	4
2005	11
2006	8
2007	10
2008	3
2009	9
2010	7
2011	12
2012	15

*For details of domain name disputes, please refer to the "Domain Name Dispute Resolution Policy (DRP)" posted by Japan Network Information Center (<http://www.nic.ad.jp/ja/drp/>) (in Japanese).

03 · 1 History

2000	Dec.	JPRS was established.
2001	Feb.	General-use JP Domain Name Priority Registration Application started.
	Apr.	General-use JP Domain Name Concurrent Registration Application started.
	May	General-use JP Domain Name First-Come First-Served Registration Application started.
2002	Feb.	ccTLD Sponsorship Agreement was concluded with ICANN.
	Apr.	Management and administration of .JP TLD was transferred from JPNIC to JPRS.
	Oct.	LG.JP was established. JPRS started distributing a plug-in for Microsoft Internet Explorer®, “i-Nav™.”
2003	Jan.	The cumulative number of registered JP domain names exceeded 500,000.
	Jun.	JPRS received the approval from ICANN to start IDN service.
	Jul.	RFC-based Japanese JP Domain Name registration service started.
	Dec.	“Japanese JP Access Site (http://jajp.jp/)” for mobile phones was established.
2004	Feb.	IP Anycast technology was introduced in JP DNS service ([a.dns.jp] [d.dns.jp]). “Nihongo JP Navi” service was started.
	Jul.	JP domain name started full support for IPv6, for the first time in the world as a TLD.
	Dec.	The portal site “Nihongo dot JP” (http://日本語.jp/) for promoting Japanese JP Domain Name was launched.
2005	Jan.	The portal site “Jinmei Jiten dot JP” (http://人名事典.jp/) to introduce Japanese JP domain names using personal names was launched.
	Jun.	Work on eliminating risks due to improper management of DNS servers was started.
	Dec.	“Eki Machi Guide” (http://駅街ガイド.jp/), which provides information on areas around stations using Japanese JP domain names consisting of station names throughout Japan, started. JPRS started operation of the M-Root DNS server in cooperation with the WIDE Project.
2006	Jan.	JPRS started deleting improper DNS server registrations.
	Apr.	JPRS shortened the processing time for JP DNS update.
	Sep.	JPRS changed the number of GO.JP domain names which each government organization can register. Japanese JP domain names (for public administration, judiciary and legislative process) reserved for the government were released for relevant government organizations.
	Nov.	The cumulative number of registered General-use JP domain names exceeded 500,000.
	Dec.	JPRS published guidelines for making URLs consisting of Japanese domain names clickable in email text.
2007	Jan.	The cumulative number of registered CO.JP domain names exceeded 300,000.
	Mar.	“Procedure for recovering deleted domain name registration” was introduced for General-use JP Domain Name.
	Dec.	IP Anycast technology was introduced to the JP DNS service ([e.dns.jp]).
2008	Mar.	The cumulative number of registered JP domain names exceeded one million.
	Jun.	JPRS started the real-time application process service for CO.JP Domain Name.
	Oct.	The JP DNS server configuration was changed (c.dns.jp and g.dns.jp added).
2009	Apr.	JPRS announced its participation in the BIND 10 development project.
	Nov.	JPRS extended the coverage of the real-time application process service.
2010	May	JPRS distributed a cartoon booklet “How the Internet Works” free of charge to junior and senior high schools across Japan.
2011	Jan.	JPRS deployed DNSSEC to the JP domain name service.
	Feb.	The cumulative number of registered JP domain names exceeded 1.2 million.
	Sep.	JPRS published “DNS Practices”, a book on DNS, written by JPRS engineers. JPRS decided to establish “Prefecture Type JP Domain Name”.
2012	Jul.	Priority Registration Application of the Prefecture Type JP Domain Name started.
	Aug.	The cumulative number of registered JP domain names exceeded 1.3 million.
	Sep.	Concurrent Registration Application of the Prefecture Type JP Domain Name started.
	Nov.	General Registration Application of the Prefecture Type JP Domain Name started.

03·2 JP Domain Name Advisory Committee

The JP Domain Name Advisory Committee was established in 2002 in order to maintain fairness and neutrality of the .JP registry operations. The committee members from outside of JPRS with various viewpoints consider policies for JP domain name services.

(1) Consultations and Advisories

Consultation / Advisory	Consultation Date Document No.	Advisory Date Document No.
Relaxation of 1-domain-name-per-organization limitation on Organizational/Geographic Type JP Domain Name in case of organizational mergers	Sep. 6, 2011 JPRS-ADV-2011001	Mar. 9, 2012 JPRS-ADVRPT-2011001
Registration data collected by the registry and display of registrant names via Whois	Sep. 10, 2012 JPRS-ADV-2012001	(under consideration)
Method for appointing the members of the 7th JP Domain Name Advisory Committee	Dec. 13, 2012 JPRS-ADV-2012002	(under consideration)

*For details about consultation and advisory themes, please refer to "JP Domain Name Advisory Committee" (<http://jprs.jp/advisory/>) (in Japanese).

(2) Advisory Committee Meetings

- Feb. 20 **40th JP Domain Name Advisory Committee meeting**
A basic agreement was reached on the draft advisory report developed according to the discussion at the 39th meeting on the inquiry “Relaxation of one-domain-name-per-organization limitation on Organizational/Geographic Type JP Domain Names in case of organizational mergers.”
- May 31 **41st JP Domain Name Advisory Committee meeting**
JPRS explained its response to the report “Relaxation of one-domain-name-per-organization limitation on Organizational/Geographic Type JP Domain Names in case of organizational mergers” (JPRS-ADVRPT-2011001). JPRS summarized the state of the JP Domain Name and the other topics related to domain names, and the committee members made various comments on the subject.
Mr. Koichi Endo, a member of the 6th JP Domain Name Advisory Committee, expressed his intention to resign. The committee decided to recommend Mr. Yoshio Takeyama as the member representing businesses to JPRS.
- Sep. 10 **42nd JP Domain Name Advisory Committee meeting**
Mr. Koichi Endo resigned from the 6th JP Domain Name Advisory Committee. It was reported that Mr. Yoshio Takeyama was appointed as his successor. Committee members offered comments on the inquiry “Registration data collected by the registry and display of registrant names via Whois” (JPRS-ADV-2012001) submitted by the JPRS Board of Directors.
- Dec. 13 **43rd JP Domain Name Advisory Committee meeting**
An outline of the draft advisory report on the inquiry “Registration data collected by the registry and display of registrant names via Whois” (JPRS-ADV-2012001) was explained. The outline was developed based on the discussion at the 42nd Advisory Committee meeting. The committee members provided comments on the content of the outline.
The committee members expressed opinions on the inquiry “Method of appointing members of the 7th JP Domain Name Advisory Committee” (JPRS-ADV-2012002) submitted by the JPRS Board of Directors.

03 · 3 Proposals and Presentations

*Original materials are written in English, unless otherwise specified.

Date	Title	At	Hosted by
Jan. 20	Are AAAA Filtering and DNSSEC Compatible?	JANOG29 Meeting	JANOG (*1)
Feb. 2	DNS Blocking against Child Pornography - Japan update -	CENTR GA	CENTR (*2)
Mar. 25	Number of possible DNSSEC Validators seen at JP, 1 year difference	IEPG Meeting	IEPG (*3)
Mar. 29	PRECIS Mappings	IETF83 precis WG Meeting	IETF (*4)
Mar. 30	DNSSEC KSK rollover failure recovery practices	IETF83 dnsop WG Meeting	IETF
Apr. 25	10-minute Brief on the Relationship between Ghost Domain Names and the DNS Penetration Issue	DNSOPS.JP BoF	DNSOPS.JP (*5)
Apr. 25	DNS and DNSSEC	DNSSEC 2012 Spring Forum	DNSSEC Japan (*6)
Apr. 25	Status of Root/.JP	DNSSEC 2012 Spring Forum	DNSSEC Japan
May 8	Report on ccNSO-related Issues	ICANN Debriefing Session	JPNIC (*7)/IAjapan (*8)
Jun. 4	DNSSEC KSK rollover failure recovery practices	26th CENTR Technical workshop	CENTR
Jun. 4	A method for large PCAP file analysis and preliminary results of JP DNS query measurement	26th CENTR Technical workshop	CENTR
Jun. 6	Short Introduction "Launching Prefecture-SLDs under .JP"	CENTR Admin Workshop	CENTR
Jun. 13-15	Basics of Domain Names and DNS	Interop Tokyo 2012	Interop Tokyo 2012 Steering Committee (*9)
Jun. 13-15	The Proper Way to Move Your Servers (in DNS Context) ? - Felt As If They Never Switch? -	Interop Tokyo 2012	Interop Tokyo 2012 Steering Committee
Jun. 15	Threats against Cache DNS Servers - Ghost Domain Names -	Interop Tokyo 2012	Interop Tokyo 2012 Steering Committee
Jun. 21	New gTLDs and ccTLDs	APTLD Members Meeting	APTLD(*10)
Jul. 19	DNS traffic analysis -- Issues of IPv6 and CDN --	SAINT 12	SAINT(*11)
Jul. 31	Report on ccNSO-related Issues	ICANN Debriefing Session	JPNIC / IAjapan
Aug. 31	Introduction to DNS	DNS Summer Days 2012	DNSOPS.JP
Sep. 1	Various Issues Surrounding Delegation	DNS Summer Days 2012	DNSOPS.JP
Sep. 1	BIND 9 Update	DNS Summer Days 2012	DNSOPS.JP
Sep. 1	BIND 9 Support by ISC	DNS Summer Days 2012	DNSOPS.JP
Sep. 27	Customer Services in .JP	CENTR Admin Workshop	CENTR
Sep. 27	.JP Topics	CENTR Admin Workshop	CENTR
Oct. 5	How JP registry tries to raise its visibility	CENTR GA	CENTR
Oct. 17	Encouraging DNSSEC Adoption What Has Worked and What Hasn't	ICANN DNSSEC Workshop	ICANN(*12)
Nov. 20	Report on ccNSO-related Issues	ICANN Debriefing Session	JPNIC / IAjapan

Date	Title	At	Hosted by
Nov. 21	No Child Knows How Dear He Is to His Parents? Issues Concerning Delegation - Lunch with DNS -	Internet Week 2012 Lunch Seminar	JPNIC
Nov. 21	DNSSEC Basics	Internet Week 2012 DNSSEC Tutorial	JPNIC
Nov. 21	JP DNS Update	Internet Week 2012 DNSDAY	JPNIC
Nov. 21	DNS Update Focusing on Domain Names	Internet Week 2012 DNSDAY	JPNIC
Nov. 21	Introduction to BIND 10	Internet Week 2012 DNSDAY	JPNIC
Nov. 21	Overview of New gTLDs	Internet Week 2012 DNSDAY	JPNIC
Nov. 21	Trend of IPv6 Queries in .JP	DNSOPS.JP BoF	DNSOPS.JP
Nov. 26	.JP Registry	AP ccTLD Roundtable	TWNIC (*13)
Nov. 27	Governance Framework of .JP	APTLD members meeting	APTLD
Dec. 10	Viewers' side analysis of social interests	ICDM Workshop on Data Mining for Service	ICDM(*14)
Dec. 21	Report of IETF 85 - DNS and Internationalization -	IETF85 Reporting Session	ISOC-JP(*15)

- *1 JANOG: Japan Network Operators' Group <http://www.janog.gr.jp/>
- *2 CENTR: Council of European National Top Level Domain Registries <http://www.centri.org/>
- *3 IEPG: Internet Engineering and Planning Group <http://www.iepg.org/>
- *4 IETF: The Internet Engineering Task Force <http://www.ietf.org/>
- *5 DNSOPS.JP: DNS Operators Group, Japan <http://dnsops.jp/>
- *6 DNSSEC Japan <http://dnssec.jp/>
- *7 JPNIC: Japan Network Information Center <http://www.nic.ad.jp/>
- *8 IAJapan: Internet Association Japan <http://www.iajapan.org/>
- *9 Interop Tokyo 2012 Steering Committee <http://www.interop.jp/>
- *10 APTLD: Asia Pacific Top Level Domain Association <http://www.aptdl.org/>
- *11 SAINT: IEEE/IPSJ International Symposium on Applications and the Internet <http://www.saintconference.org/>
- *12 ICANN: Internet Corporation for Assigned Names and Numbers <http://www.icann.org/>
- *13 TWNIC: Taiwan Network Information Center <http://www.twnic.net.tw/>
- *14 ICDM: IEEE International Conference on Data Mining <http://www.cs.uvm.edu/~icdm/>
- *15 ISOC-JP: Japan Chapter of the Internet Society <http://www.isoc.jp/>

03 · 4 Press Releases

*Original materials are written in Japanese.

Date	Title
Mar. 1	JPRS Will Launch a New Registration Service for “Prefecture Type JP Domain Names” in November 2012 – Service outline and schedule are published –
Mar. 5	JPRS Supports the “14th ThinkQuest JAPAN,” a Web Contest for Junior and Senior High School Students, and Presents the “Best Domain Naming Award (JPRS Special Award)” – Supporting the Internet education of young people by allowing them to try using JP domain names –
Mar. 27	JPRS Releases “JP Domain Name Registry Report 2011” Today – Striving to further improve the “reliability” of JP domain name services with the introduction of DNSSEC –
May 15	JPRS Distributes Free Graphic Comic-style Booklet on “How the Internet Works” to Educational Institutions in Japan – Project for third consecutive year to respond to demand from educational institutions that appreciate the booklet –
Jun. 14	JPRS Files a New gTLD Program Application with ICANN to Establish “.jprs” for the Purpose of Research for the Internet –To contribute to the advancement of JP domain name services and the Internet community–
Jul. 17	Priority Registration of the Prefecture Type JP Domain Name Started – Launched on July 16, 2012 for character strings identical to trademarks –
Aug. 2	Total Number of Registered JP Domain Names Tops 1.3 Million
Sep. 18	Concurrent Registration of the Prefecture Type JP Domain Name Started – Applications are accepted from September 17 to October 21, 2012 –
Sep. 20	JPRS Institutes the “Best Domain Naming Award (JPRS Special Award)” in the “Japan Web Grandprix”
Nov. 19	General Registration of the Prefecture Type JP Domain Name Started
Dec. 7	JPRS Presented the “Best Domain Naming Award (JPRS Special Award)” in “Japan Web Grandprix,” a Contest for Corporate Websites

*Please refer to “Press Release” (<http://jprs.co.jp/en/press/>) for the latest releases in English.

03 · 5 Provision of Technical Information Related to DNS

*Original materials are written in Japanese.

Date	Title
Jan. 11	Denial of Service (DoS) Attacks Capitalizing on the Vulnerability of PowerDNS - Version upgrade/application of patch is recommended -
Feb. 17	Vulnerability Caused by "Ghost Domain Names"
Mar. 15	DoS Attacks Taking Advantage of the Vulnerability of Windows DNS Servers
Jun. 5	(Urgent) Vulnerability of BIND 9.x (Including Service Outage) - Version upgrade is strongly recommended for both cache and authoritative servers -
Jun. 22	Risk of Domain Hijacking Resulting from Problems in Service Operations
Jul. 4	Risk of DNS Poisoning Caused by Mixing Caching and Authoritative Services in the Same Name Server
Jul. 20	(Urgent) DoS Attack Exploiting the Vulnerability of NSD 3.x - Version upgrade/application of patch is strongly recommended -
Jul. 25	BIND 9.x Service Disruption That Occurs When Receiving a Large Number of Requests for DNSSEC Verification - Version upgrade is strongly recommended -
Jul. 25	BIND 9.9.x Memory Leak Occurring upon Receiving a Large Number of TCP Queries - Version upgrade is strongly recommended for both cache and authoritative servers -
Jul. 30	DoS Attack Exploiting the Vulnerability of NSD 3.2.11/3.2.12 - Configuration check and necessary countermeasures are recommended -
Sep. 13	(Urgent) Vulnerability of BIND 9.x (Service Disruption) - Version upgrade is strongly recommended for both cache and authoritative servers -
Oct. 10	(Urgent) Vulnerability of BIND 9.x (Service Disruption) (Published on October 10, 2012) - Application of patch is strongly recommended for both cache and authoritative servers -
Nov. 1	Vulnerability in DomainKeys Identified Mail (DKIM) Processing with Exim 4.70-4.80 - Version upgrade is strongly recommended -
Dec. 5	Service Disruption of Named Caused by Implementation Bugs of BIND 9.8.x/9.9.x with DNS64/RPZ Enabled (Published on December 5, 2012) - Version upgrade is strongly recommended -
Dec. 18	Change of IP Address at d.root-servers.net

*For the latest information, please refer to the "Technical Information Related to DNS" (<http://jprs.jp/tech/>) (in Japanese).

About JPRS

JPRS provides domain name services such as domain name management, administration and distribution, and also performs domain name system (DNS) operations.

In addition, JPRS is engaged in research and development of various Internet technologies.

● Domain Name Management and Administration

JPRS manages and administers domain names. In particular, JPRS plays an important role as the registry of JP Domain Name, or domain names of Japan. You may have seen addresses for websites and emails such as “http://○○○.jp” and “△△△@○○○.jp”. JPRS manages and administers a part of these addresses, namely, strings in the form of “○○○.jp”. Domain names are the key to accessing the Internet. JPRS is constantly improving its services so that JP domain names will continue to assist the activities of all kinds of Internet users, including companies, organizations, and individuals.

● DNS Operation

DNS (Domain Name System) is a system for identifying computers connected to the Internet using domain names, so it is sometimes referred to as the “phone book for the Internet.”

If DNS were to fail, people would not be able to access websites or exchange emails using domain names. To prevent such a catastrophe, JPRS has established a 24/7 system to ensure safe operation of the “JP DNS” for managing JP domain names.

● R&D of Internet Technologies and International Activities

JPRS takes an active part in the research and development of advanced technologies to promptly respond to changes in the Internet environment and social needs. Specifically, it conducts standardization activities and technical verification for the smooth deployment of DNSSEC, a mechanism for improved DNS security. JPRS also verifies the technical aspects of email address internationalization (EAI) that will allow non-English characters such as Japanese to be used in email addresses. JPRS actively publishes the results of these activities and shares information at IETF and other meetings to contribute to the network society.

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Note: This English translation is provided for informational purposes only.
For accuracy, please refer to the Japanese version.

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