2010.1-12

Jp



JP Domain Name Registry Report





Introduction

In 2010, .JP was recognized as one of the world's safest country code top-level domains (ccTLDs) for the second consecutive year^{*1}. This, we believe, is the result of our careful management of domain name registration, appropriate services for JP Registrars and service providers, as well as cooperative activities with JPCERT/CC^{*2} and other security-related organizations at home and abroad.

Also in 2010, we continued to face threats to the foundation of the Internet, such as the exhaustion of IPv4 address inventory and the discovery of vulnerabilities in DNS software.

As a company supporting the basis of the Internet society through JP domain names and DNS, JPRS is striving to make the Internet safe for everyone to use. To this end, JPRS promptly provides information and deals with risks and problems as they arise. JPRS also actively contributes to discussions of global issues and conveys relevant information to parties 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 &}quot;Mapping the Mal Web-the World's Riskiest Domains" report published by McAfee, Inc. in October 2010

^{*2} JPCERT/CC: Japan Computer Emergency Response Team Coordination Center

Registry Report Index

01 Registry Activities

01.1	Goal of JPRS as the JP Domain Name Registry	03
01·2	Activities in 2010	04
01·3	International Relations	10
01 ·4	Activities in Japan	16
01 ·5	Overview of this Term's Activities and Challenges for the Future	17

02 Statistical Information

02 ∙1	Change in the Cumulative Number of Registered JP Domain Names	19
02·2	Breakdown of the Cumulative Number of Registered JP Domain Names	20
02·3	Number of JP Domain Name Registrations by Prefecture	21
02·4	Transition of DNS Configuration Rate	22
<mark>02</mark> ∙5	Number of Accredited JP Registrars	23
02 ·6	Number of Complaints Based on the Domain Name Dispute Resolution Policy (JP-DRP)	24

03 Reference

03·1	History	25
03 ∙2	Domain Name Advisory Committee	26
03·3	Proposals and Presentations	28
03 ∙4	Press Releases	30



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 we compete and collaborate 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 2010

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.

Submission of Comments on the "Selection Criteria (proposal)" for ".日本" Registry (March) The Japan Internet Domain Name Council invited comments on the "Draft Selection Criteria" for ".日本" registry. In response, JPRS submitted its comments regarding two criteria: the technical capability and the business plan.

http://jprs.co.jp/topics/2010/100323.html (in Japanese)

Publication of RFC Written by JPRS Engineer (April)

RFC5825^{*1} (Displaying Downgraded Messages for Email Address Internationalization), co-authored by Kazunori Fujiwara of JPRS and Barry Leiba of Huawei Technologies, was issued on April 12 (US time). Similarly to the previous RFCs on email address internationalization (EAI), this RFC provides references for implementing experimental specifications for the preparation of standard specifications, as well as conducting verification experiments on the Internet.

http://jprs.co.jp/topics/2010/100414.html (in Japanese)

Geographic Type JP Domain Names Reconstruction Working Group Established (May)

JPRS set up the "Geographic Type JP Domain Names Reconstruction Working Group" on May 10. The registration of Geographic Type JP domain names started in December 1993 as an experimental project, and these domain names have been in full-scale use since April 1996. However, the circumstances for Geographic Type JP domain names have changed in many ways, due to the introduction of General-use JP domain names that allow registration by individuals, the introduction of LG.JP for local public institutions, and municipal mergers. Therefore, JPRS started studying the reconstruction of Geographic Type JP domain names so that they can be registered and used more easily by people in various regions, thereby contributing to the development of local communities. In June, JPRS conducted a questionnaire survey to invite comments from a wide range of users.

http://jprs.jp/geo-wg/ (in Japanese)

http://jprs.co.jp/press/2010/100624.html (in Japanese)

^{*1} RFC: Request for Comments



Free Cartoon Booklet "How the Internet Works" Sent to Junior and Senior High Schools across Japan (May)

The Info-Communications Promotion Month started in mid May as part of Internet-related educational activities. In line with this, from May 25 to June 30, JPRS set up a special web page (http://マンガで学ぶ.jp) where junior and senior high school teachers could apply for the booklet, and distributed it free of charge. In October and November, JPRS sent out a similar announcement to teachers of technical colleges regarding its "Ponta's Great Adventure in the Network" cartoon booklet. This booklet contains a story to help readers learn how the Internet works, explaining how we can reach a certain website and the system of Internet addresses, or "domain names," with many illustrations.



Ponta's Great Adventure in the Network

http://jprs.co.jp/press/2010/100525.html (in Japanese)

Yoshiro Yoneya of JPRS Appointed Co-Chair of IETF PRECIS Working Group (June)

Yoshiro Yoneya of JPRS was appointed Co-Chair of the PRECIS Working Group (WG) set up in IETF² to promote the standardization of Internet technologies. He is in charge of promotion activities together with Marc Blanchet from Viagenie (Canada).

The goal of the PRECIS WG is to update and refine the standard protocol prescribed in RFC3454 to correctly judge the matching of character types and compatible characters when character strings such as kanji and Arabic letters are used in domain names.

http://jprs.co.jp/press/2010/100615.html (in Japanese)

Masato Minda of JPRS Selected as TCR for ICANN's Root Zone DNSSEC Operation (June)

Masato Minda of JPRS was selected as one of the Trusted Community Representatives (TCR) set up by ICANN^{*3} for the implementation of DNSSEC in the root zone. As representatives of the global Internet community, TCR will participate in the operation of HSM (hardware for DNSSEC key generation and storage) and key ceremonies (procedures to generate and update keys) to deploy DNSSEC in the root zone.

Minda participated in the first key ceremony held in July in the ICANN's facility on the West Coast of the United States.

http://jprs.co.jp/press/2010/100617.html (in Japanese)

*2 IETF: Internet Engineering Task Force *3 ICANN: Internet Corporation for Assigned Names and Numbers

JPRS Hosted "JANOG26 Meeting" (July)

JPRS hosted the JANOG26 Meeting to discuss and exchange information on technical matters and operations related to the Internet in Japan. JPRS has been actively participating in JANOG meetings as a sponsor, providing support to its activities and making presentations on DNS-related technology.

In the JANOG26 Meeting, we also provided the event venue and helped event operations. The meeting, which was held in Ebisu, Tokyo, attracted more than 600 participants.



JANOG26 Meeting

http://jprs.co.jp/press/2010/100601.html (in Japanese)

http://www.janog.gr.jp/en/index.php?JANOG26%20Programs

Internationalized Domain Name Tool Kit 2.0 Released (July)

JPRS released the internationalized domain name Tool Kit 2.0 (idnkit-2.0).

The idnkit is equipped with the specifications of the internationalized domain name (IDN) being standardized at IETF. The kit offers tools for site operators and API functions for application developers. idnkit-2.0 is based on idnkit-1.0 developed and publicized by the Japan Network Information Center in 2003. This tool is compatible with the new IDN standards.

http://jprs.co.jp/en/topics/2010/100720.html

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

Submitted Application in Response to Open Recruitment of ".日本" Registry (August)

JPRS submitted an application in response to the open recruitment of the ".日本" registry by the Japan Internet Domain Name Council. In this application, JPRS proposed that ".日本" and ".JP" domain name registrants be matched up completely to restrain the cost to be borne by domain name registrants, and to prevent confusion among domain name registrants and Internet users when the ".日本" service is introduced.

On October 12, JPRS received a notice that the Japan Internet Domain Name Council had selected JPRS as the sole candidate for ".日本" registry and reported this to the Ministry of Internal Affairs and Communications.

http://jprs.co.jp/topics/2010/100817.html (in Japanese)

http://jprs.co.jp/topics/2010/101012.html (in Japanese)



Activities to Promote Understanding of Domain Names (September)

JPRS opened "ドメインまるわかり.jp" (Everything You Should Know about Domain Names), a website that contains articles related to domain names.

The website has a collection of magazine articles and web postings that explain the roles of the domain name, examples of use, and other domain-name-related topics. The website also has quizzes and cartoons to help visitors learn the mechanism of the Internet and the basics of domain names in a fun manner.



ドメインまるわかり.jp

● http://ドメインまるわかり.jp/

DS Records of the JP Zone Registered in the Root Zone (December)

DS records are necessary for building a chain of trust in DNSSEC from the root zone to the JP zone. JPRS applied for the registration of the DS records to IANA^{*4} and completed the registration and publication in the root zone on December 10, 2010. This advanced final preparations toward the introduction of DNSSEC to the JP domain name service in January 2011.

http://jprs.jp/info/notice/20090709-dnssec.html (in Japanese)

Education and Promotion

Jan. JANOG25 Meeting

JPRS took charge of Q&A regarding the current status and operation of DNSSEC and provided information on internationalized email addresses being standardized at IETF.

Jan. Anti-phishing Seminar

At a seminar held by the Anti-phishing Council of the Ministry of Economy, Trade and Industry, JPRS discussed the current situation of phishing and countermeasures from the standpoint of the JP domain name registry.

Feb. 12th ThinkQuest JAPAN

JPRS supported the "12th ThinkQuest JAPAN", a Web contest for junior and senior high school students. We provided 84 General-use JP domain names (both in Japanese and ASCII) free of charge for 42 exhibits so that they could have original domain names. JPRS also presented the Best Domain Name Award to the team who had chosen the most effective domain name to increase the appeal of their work.

Mar. HOSTING PRO2010

JPRS explained the latest trends of the domain name and DNS, as well as issues to be dealt with by hosting operators in the implementation of DNSSEC.

Jun. Interop Tokyo 2010

At the conference "Practical DNS Operation: Toward the Full-scale Spread of DNSSEC", JPRS explained DNSSEC operation methods. At the JPRS booth, we held mini-seminars on the basics of domain names and technological information on DNS



JRPS booth

Jun. IPv6 Seminar for Engineers 2010

JPRS introduced the latest trends of DNS and new TLDs at a seminar held by Hiroshima Regional IPv6 Promotion Committee.

Jul. JANOG26 Meeting

JPRS introduced the results of our survey on DNSSEC operation load in the authoritative DNS server.



Jul. DNSSEC 2010 Summer Forum

At a forum held by DNSSEC Japan, JPRS explained the system of DNSSEC and the background of its introduction to the JP domain name service. At the 9th DNSOPS.JP BoF held at the same time, we presented details about the faults corrected by BIND 9.7.1-P2.

Jul. Beginners' Seminar on How to Make Good Use of Websites

At a seminar held jointly by the Chambers of Commerce in Suita, Osaka, Amagasaki, Ibaraki and Toyonaka, JPRS discussed the necessity of corporate PR via the Internet, as well as the basics of domain names and their use.

Nov. Internet Week 2010

At the "DNSSEC Tutorial," JPRS explained the DNSSEC system and settings. We also talked about key points in realizing smooth DNSSEC operations, and some examples of troubles.

In the "DNS Day" session, JPRS presented statistics on JP DNS, domain name trends, and the global movement toward the deployment of DNSSEC.

At the 10th DNSOPS.JP BoF, we explained BIND9.7.2 functions and the system of the DNSSEC-compatible test environment.

Nov. Small- to Medium-scale Company IT Seminar "Introduction to Making Good Use of Websites"

At a seminar held by the Nikkan Kogyo Shimbun, JPRS presented domain-name-related techniques that companies can apply to guiding users to their websites.

01.3 International Relations

1. Activities at IETF

(1) Revision of Internationalized Domain Name Protocol

Internationalized domain names (IDN) refer to domain names in kanji, Hangeul, and other non-ASCII (alphanumeric) characters. IDN is an international standard for which an RFC was issued by the IETF in 2003.

Internationalized domain names were found to have some problems in their operation, and so the protocol was revised to solve these problems through several RFCs (RFC5890 to 5894) issued in August 2010.

Responding swiftly to the revised protocol, JPRS developed the internationalized domain name Tool Kit "idnkit-2" and publicized it as open source software in July 2010.

http://jprs.co.jp/en/topics/2010/100720.html

(2) Promotion of the Standardization of Internationalized Email Addresses

Email Address Internationalization (EAI) was standardized as the experimental protocol in the period from 2008 to 2010. This international standard allows non-alphanumeric characters to be used in any part of an internationalized email address combined with an internationalized domain name.

JPRS engineers wrote RFC5825 "Displaying Downgraded Messages for Email Address Internationalization", which was issued in April 2010. This RFC prescribes a method for displaying messages downgraded to maintain compatibility with the conventional email system in the MUA (Mail User Agent) of EAI-enabled email software.

Following the experimental protocol, the standardization of internationalized email addresses entered the phase of making a standard protocol for actually using these addresses. JPRS engineers participate in drafting protocol documents.

(3) Promotion of ENUM Standardization

ENUM is an international standard for using DNS to correlate telephone numbers (E.164 numbers) with Internet resources, such as email addresses and website addresses (URI). ENUM was standardized in September 2000 and revised in April 2004.

Following the revision in April 2004, ENUM (RFC3761) continuously went through revisions up to 2010, with a JPRS engineer participating as a co-author. The revision work is almost completed and a new RFC is expected to be issued in the first half of 2011.

(4) Promotion of the Standardization of Internationalized Identifier Preprocessing

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

For an internationalized identifier to identify a unique address on the Internet, identifiers must be compared and matched up correctly. To this end, identifiers containing non-alphanumeric characters must undergo proper preprocessing (e.g., conversion between uppercase and lowercase characters). At present, preprocessing is done by stringprep (RFC3454), but this must be revised in line with revisions made to internationalized domain names.

To discuss revisions to stringprep, the PRECIS Working Group (WG) was set up in June 2010. An engineer from JPRS is currently co-chairing this WG.

2. Participation in ICANN and Other International Discussions

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, protocols, and root servers.

Since it was founded, JPRS has been actively participating in the organizing of ICANN and studies of various policies, supporting the management and coordination of Internet resources led by the private sector with ICANN playing the central role. In 2002, JPRS signed a "ccTLD Sponsorship Agreement" with ICANN, by which ICANN entrusts JPRS to be the registry of Japan's ccTLD "jp".

To date, JPRS has been participating in presentations and meetings held by a variety of organizations set up in ICANN, contributing to discussions of policies and action plans to cope with problems facing ICANN and registries. JPRS is engaged in the following activities carried out in ICANN.

(1) ccNSO

ccNSO^{*1} is one of the Supporting Organisations set up in ICANN to support 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. Since ccNSO was established in 2003, JPRS has been a member and has also served as a member of the ccNSO Council.

.....

One of the achievements JPRS made in ccNSO is the planning and designing of the IDN ccTLD Fast Track Process. Since the official start of this process in November 2009, applications have been made for 33 character strings (in 22 languages), of which 15 have been approved by ICANN and entered in the root zone as IDN ccTLDs (as of January 20, 2011). In Japan, the procedure to select candidates for the ".日本" registry was taken according to this process.

While implementing the ccTLD Fast Track Process, ccNSO started full-scale discussions on the establishment of permanent policies. In the first half of 2010, a section meeting started to review the definition of characters allowed in IDN ccTLDs, and another meeting to review the ICANN Bylaws. JPRS participates as an observer in the former and as the chair in the latter.

With the introduction of new gTLDs close at hand, ccNSO members have frequently talked about marketing activities to establish the ccTLD brand. At the ccNSO meeting held in March 2010, examples presented by JPRS and EURid (.eu) spurred active discussion on how to establish trust in ccTLDs and promote the ccTLD brand to the Internet community.

In addition, JPRS participated in the ccNSO wildcard study group and the strategy/business plan study group, and gave presentations on DNSSEC implementation efforts in Japan, thus continuing to contribute to the global activities of the ccTLD community in 2010.

^{*1} ccNSO: Country Code Names Supporting Organisation



(2) SSAC

SSAC^{*2}, 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 of experts on technologies, such as TLD registries, registrars, root server operators, and Internet-related researchers.

JPRS, an SSAC member since 2007, has been making the most of its experience as a ccTLD registry and participating in activities to ensure that the Internet operates stably at the global level.

3. Participation in Registry Organizations

(1) APTLD

JPRS has been a member of APTLD^{*1} since 2002 and also served as the board member to play a part in its operation.

As the registry of JP domain names, JPRS makes suggestions for improvements of APTLD activities, provides information, and leads discussions at presentations and meetings so that we can accumulate experience and know-how and raise service standards throughout the ccTLD community in the Asia-Pacific region.

In 2010, APTLD chose IDN, security, and IPv6 as key issues, promoted information exchanges between ccTLD registries, and held technical training to support regional development. As a ccTLD member, JPRS made presentations at various meetings and, also as a board member, contributed to the planning of these meetings.

(2) CENTR

CENTR^{*2} is an association consisting of ccTLD registries mainly in the European region. As an associate member, JPRS shares information and exchanges opinions with other CENTR members.

.....

In 2010, a topic that has attracted heated global discussion was DNS blocking of illegal/inappropriate content on the Internet. Regarding this issue, JPRS submitted its basic principles as a domain name registry. CENTR is working to express opinions as a registry association, with the agreements of registries from each country.

^{*1} APTLD: Asia Pacific Top Level Domain Association

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

4. Other International Activities

(1) Participation in AP*Retreat

AP*Retreat meetings are held twice a year, in principle, for Internet-related organizations in the Asia-Pacific region and other organizations that play important roles in the Internet in each country or economy. In the meetings, representatives of each organization report on their activities and share their concerns about various issues. In addition, participants discuss how the Asia-Pacific community should tackle Internet-related issues.



AP*Retreat meeting

At the AP*Retreat held on the Gold Coast of Australia in

August 2010, JPRS took up the theme "ccTLD in the age of IDN ccTLD" to share information about ICANN activities and issues to be addressed. For example, the ICANN Bylaws allow no ccTLD registries to be ccNSO members, who therefore have no rights to vote for the ccNSO Council members. On the other hand, if IDN ccTLD registries were given ccNSO membership rights and one voting right each, countries or economies maintaining a number of IDN ccTLDs would gain many ballots. At the Retreat meeting, JPRS explained this issue and called for attention to global trends that would greatly affect the Asia-Pacific region.

(2) Participation in Root DNS Server Operator Organizations' Meetings

Representatives of root DNS server operator organizations regularly meet on the first day of IETF meetings, which are held three times a year. At these meetings, participants share information principally on the stability of server operations and topics related to the latest technology. In 2010, the main topic of conversation was how to implement DNSSEC safely and smoothly in the root zone. JPRS has been participating in these meetings as the organization in charge of M-Root DNS server operations.

(3) Participation in the BIND 10 Development Project

BIND is the most widely used DNS server software on the Internet. In April 2009, ISC, 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 from the development stage as one of the initial members.

This project has participants from many TLD registries around the world, such as CIRA (.ca) and DENIC (.de). JPRS is taking an active part in this project by not only offering financial support, but also assigning its engineers to development teams.

The first BIND 10 prototype was released in March 2010, and the other prototypes have since been released for developers.

Activities in Japan

(1) Participation in DNSSEC Japan

..... DNSSEC Japan was established in November 2009 for the purpose of introducing and disseminating DNSSEC smoothly in Japan. JPRS actively participates in this initiative, with one employee serving as Vice Chair of DNSSEC Japan.

In 2010, JPRS supported seminars and hands-on training at DNSSEC workshops held to explain the protocol. Also in the technical verification working group, JPRS provided a technical verification environment and prepared guidelines. The results of these DNSSEC Japan activities are publicized on the Web.

In support of the "DNSSEC 2010 Summer Forum" held in July 2010, JPRS gave a presentation on its own activities and schedules for introducing DNSSEC to the JP domain name service.

http://dnssec.jp/?page_id=440

(2) 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 JPNIC and IAjapan. At the sessions held in April and July 2010, JPRS reported issues on IDN ccTLD and other subjects studied by ccNSO and discussed ICANN-related issues with the other participants.





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.

Management and Administration of JP Domain Names

Activities to Enhance the Usability of JP Domain Names

JPRS stepped up efforts to improve the value of JP domain names, aiming to encourage more users to register and use domain names.

Specifically, JPRS set up the "Geographic Type JP Domain Name Reconstruction Working Group" and started studies on the reconstruction of Geographic Type JP Domain Name. The purpose is to have these domain names registered and used more easily by people in various areas and thereby contribute to local development.

Activities to Enhance Understanding of JP Domain Names and Their Use

In 2010, JPRS continued its activities to increase public awareness and understanding of domain names, while engaging in educational activities to teach the importance of choosing a right domain name and to propose ways to use them effectively.

For example, as part of the Internet-related educational activities, JPRS accepted applications for a free cartoon booklet "How the Internet Works" from teachers of junior and senior high schools and technical colleges across Japan, and distributed the booklet free of charge. The booklet contains a story that explains how the Internet works, and how we can reach a certain website and the system of Internet addresses, or "domain names", with many illustrations.

Our promotion activities ranged from working with news reporters and writing for journals, to giving lectures at corporate seminars held by newspaper companies and chambers of commerce and industry. Thus, in a variety of areas, we conducted educational activities to enhance the understanding of domain names and the Internet.

Regarding Japanese JP domain names, we introduced a greater number of usage examples to help people recognize their uses and benefits.

DNS Operations

Activities to Deploy DNSSEC in the JP Domain Name Service

JPRS stepped up preparations for the deployment of DNSSEC, DNS security extensions, in the JP domain name service in January 2011. To this end, JPRS started DNSSEC signatures in the JP zone in October 2010. In December, JPRS applied to IANA for the registration of "DS records of the JP zone in the root zone", thus completing the registration and publication of DS records in the root zone.

Also for the smooth introduction and diffusion of DNSSEC in Japan, JPRS participated in DNSSEC Japan's activities and a variety of events, such as the DNSSEC 2010 Summer Forum held in July 2010.

JPRS is going to implement DNSSEC in the JP DNS and JP domain name services provided by JPRS itself, while conducting promotional and educational activities and providing information to various DNS-related parties.

R&D of Internet Technologies and International Activities

Promotion of International Standardization of Internet-related Technologies

To promote internationalized domain names, JPRS developed an IDN Tool Kit 2 named "idnkit-2" which complies with the revised RFC on IDN soon after the revision in August 2010. idnkit-2 was publicized as an open source software in July 2010.

RFC5825 (Displaying Downgraded Messages for Email Address Internationalization) written by a JPRS engineer was issued in April 2010 to promote the standardization of internationalized email addresses. Since the spring of 2010, the standardization of internationalized email addresses has entered the phase of establishing a standard protocol, based on the demonstration experiment protocol for actually using these addresses. JPRS engineers are involved in drafting protocol documents.

Regarding the standardization of ENUM, efforts for revising ENUM (RFC 3761), previously modified in April 2004, continued in 2010; and a JPRS engineer has been co-authoring the revision document.

Another JPRS engineer acts as a co-chair in the PRECIS WG, which was set up in June 2010 to promote the standardization of internationalized identifiers.

Participation in the BIND 10 Development Project

Since April 2009, JPRS has participated in the project to develop the next version of DNS software, BIND 10. JPRS is taking an active part in this project, by not only offering financial support but also assigning its engineers to the project.

The first BIND 10 prototype was released in March 2010.





Change in the Cumulative Number of Registered JP Domain Names

As of January 1, 2011, the cumulative number of registered JP domain names reached 1,198,105, marking an increase of 57,946 in one year.



				(Number of names)
Year/Month	Organizational/Geographic Type	General-use (ASCII)	General-use (Japanese)	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	121,992	61,507	466,839
2003/01	297,413	153,949	51,544	502,906
2004/01	309,193	199,698	45,402	554,293
2005/01	327,742	254,131	63,324	645,197
2006/01	346,340	323,182	116,602	786,124
2007/01	363,768	394,404	124,153	882,325
2008/01	378,903	468,125	141,858	988,886
2009/01	389,598	539,212	134,921	1,063,731
2010/01	399,339	607,066	133,754	1,140,159
2011/01	406,856	667,538	123,711	1,198,105

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



*As of January 1, 2011



				(Number of names)
JP D	oomain Name Types	1 January 2011 Number of Registrations	1 January 2010 Number of Registrations	Difference
	AC: Higher education institution	3,512	3,528	-16
	AD: JPNIC Member	275	274	+1
	CO: Company	342,055	334,755	+7,300
	ED: Primary school, junior and senior high school	4,581	4,562	+19
Organizational/	GO: Japanese government	751	791	-40
Geographic Type	GR: Group	7,627	8,024	-397
	LG: Japanese local authority	1,849	1,876	-27
	NE: Network service	16,685	16,987	-302
	OR: Judicial body other than kaisha	26,855	25,658	+1,197
	Geographic Type	2,666	2,884	-218
Comercel was	ASCII	667,538	607,066	+60,472
General-use	Japanese	123,711	133,754	-10,043
Total JP	Total JP Domain Name Registration		1,140,159	+57,946

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





Number of JP Domain Name Registrations by Prefecture

			*As of January 1, 201
Prefecture	Organizational/Geographic Type	General-use (ASCII)	General-use (Japanese)
Hokkaidou	2.8%	2.5%	1.1%
Aomori	0.5%	0.3%	0.1%
Iwate	0.4%	0.3%	0.1%
Miyagi	1.2%	0.8%	0.3%
Akita	0.4%	0.2%	0.4%
Yamagata	0.6%	0.3%	0.1%
Fukushima	0.8%	0.5%	0.2%
Ibaraki	1.4%	1.1%	0.6%
Tochigi	1.0%	0.6%	0.2%
Gunma	1.1%	0.7%	0.5%
Saitama	4.1%	2.8%	1.5%
Chiba	3.1%	2.5%	1.3%
Tokyo	32.8%	42.6%	70.0%
Kanagawa	6.7%	5.6%	3.2%
Niigata	1.1%	0.8%	0.4%
Toyama	0.7%	0.5%	0.2%
Ishikawa	0.8%	0.6%	0.2%
Fukui	0.5%	0.4%	0.1%
Yamanashi	0.5%	0.4%	0.2%
Nagano	1.4%	0.9%	0.5%
Gifu	1.2%	0.8%	0.3%
Shizuoka	2.3%	1.6%	0.7%
Aichi	5.5%	3.6%	2.7%
Mie	0.8%	0.6%	0.4%
Shiga	0.6%	0.5%	0.3%
Kyoto	2.0%	2.6%	1.5%
Osaka	9.6%	13.0%	4.8%
Hyogo	3.1%	2.6%	2.3%
Nara	0.6%	0.5%	0.3%
Wakayama	0.4%	0.3%	0.1%
Tottori	0.2%	0.2%	0.1%
Shimane	0.3%	0.2%	0.1%
Okayama	1.1%	0.8%	0.5%
Hiroshima	1.6%	1.1%	0.6%
Yamaguchi	0.5%	0.4%	0.1%
Tokushima	0.3%	0.3%	0.2%
Kagawa	0.5%	0.5%	0.2%
Ehime	0.6%	0.6%	0.2%
Kochi	0.3%	0.2%	0.1%
Fukuoka	3.0%	2.6%	2.2%
Saga	0.3%	0.2%	0.2%
Nagasaki	0.5%	0.4%	0.1%
Kumamoto	0.7%	0.6%	0.2%
Oita	0.4%	0.3%	0.1%
Miyazaki	0.4%	0.3%	0.1%
Kagoshima	0.5%	0.4%	0.1%
Okinawa	0.6%	0.6%	0.4%



Transition of DNS Configuration Rate



Year/Month	Organizational/Geographic Type	General-use (ASCII)	General-use (Japanese)
January, 2009	98.1%	94.3%	71.4%
January, 2010	98.3%	95.4%	75.1%
January, 2011	99.0%	96.3%	76.0%





Number of Accredited JP Registrars



Year/Month	Organizational/Geographic Type	General-use	Total
April, 2001		443	443
January, 2002		490	490
January, 2003	560	546	1,106
January, 2004	557	559	1,116
January, 2005	553	564	1,117
January, 2006	562	576	1,138
January, 2007	559	572	1,131
January, 2008	557	573	1,130
January, 2009	558	577	1,135
January, 2010	556	578	1,134
January, 2011	564	583	1,147

*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.

(Number of Registrars)



Number of Complaints Based on the Domain Name Dispute Resolution (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

For details of domain name disputes, please refer to the "JP Domain Name Dispute Resolution Policy (JP-DRP)" posted by the Japan Network Information Center (http://www.nic.ad.jp/en/drp/).





2000 2001	Dec. Feb. Apr. May	JPRS was established. General-use JP Domain Priority Registration Phase started. General-use JP Domain Concurrent Registration Phase started. General-use JP Domain Formal FCFS Registration started.
2002	Feb. Apr. Oct. Oct.	ccTLD Sponsorship Agreement was concluded with ICANN. Management and administration of .JP TLD was transferred from JPNIC to JPRS. LG.JP was established. JPRS started distributing a plug-in for Microsoft Internet Explorer [®] , "i-Nav™."
2003	Jan. Jun. Jul. Dec.	Total number of JP domain name registrations reached 500,000. JPRS received approval from ICANN to start IDN service. RFC-based Japanese JP domain name registration service started. "Japanese JP Access Site (http://jajp.jp/)" for mobile phones was established.
2004	Feb. Feb. Jul. Dec.	IP Anycast technology was introduced in JP DNS service ([a.dns.jp] [d.dns.jp]) "Nihongo JP Navi" service started. JP domain name started full support for IPv6, for the first time in the world as a TLD. 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/) for promoting Japanese
	Jun. Dec.	JP Domain Name was launched. Work on eliminating risks due to inadequate management of DNS servers was started. "Eki Machi Guide" (http://駅街ガイド.jp/), which provides information on areas around stations using Japanese JP domain names which consist of station names throughout
	Dec. Jan. Mar. Apr. Sep.	Japan, started. JPRS started operation of the M-Root DNS server in cooperation withWIDE Project. 2006 JPRS started deleting improper DNS server registrations. Cumulative number of JP domain names exceeded 800,000. JPRS shortened processing time for JP DNS update. JPRS changed the number of GO.JP domain names which each government organization
	оср.	can register. Japanese JP domain names reserved for the government were released for relevant government organizations.
	Nov. Dec.	Cumulative number of General-use JP domain names exceeded 500,000. JPRS published guidelines for making URL consisting of Japanese domain name clickable in email text.
2007	Jan. Mar.	Cumulative number of registered CO.JP domain names exceeded 300,000. "Procedure for recovering deleted domain name registration" was introduced for
	Dec.	General-use JP domain names. IP Anycast technology was introduced to the JP DNS service ("e.dns.jp").
2008	Mar. Jun. Oct.	Cumulative number of registered JP domain names exceeded one million. JPRS started the real-time application process service for CO.JP domain names. The JP DNS server configuration was changed (c.dns.jp and g.dns.jp added)
2009	Apr. Jul. Nov.	JPRS announced its participation in the BIND 10 development project. JPRS announced its plan to implement DNSSEC in JP domain name services. 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.
	Jul.	JPRS announced its plan to start DNSSEC for JP domain name services in January 2011.

03.2 JP Domain Name Advisory Committee

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 names. Below are the issues which were discussed in the committee in 2010.

(1) Consultations and Advisories

Consultation/Advisory	Consultation Date Document No.	Advisory Date Document No.
Introduction of DNS security extensions (DNSSEC)	Sep. 7, 2009 JPRS-ADV-2009001	Mar. 29, 2010 JPRS-ADVRPT-2009001
Reconstruction of Geographic Type JP Domain Name	Aug. 25, 2010 JPRS-ADV-2010001	Dec. 28, 2010 JPRS-ADVRPT-2010001
Method for appointing the members of the 6th JP Domain Name Advisory Committee	Oct. 27, 2010 JPRS-ADV-2010002	Dec. 16, 2010 JPRS-ADVRPT-2010002

*Please refer to "JP Domain Name Advisory Committee" (http://jprs.co.jp/en/advisory.html) for details.



(2) Advisory Committee Meetings

Mar. 3 31st JP Domain Name Advisory Committee meeting

An agreement was reached regarding a draft report drawn up in response to the inquiry "Introduction of DNS Security Extensions (DNSSEC)" (JPRS-ADV-2009001).

May. 12 32nd JP Domain Name Advisory Committee meeting

JPRS reported its action regarding the report "Introduction of DNS Security Extensions (DNSSEC)" (JPRS-ADVRPT-2009001).

JPRS explained the general situation of JP domain names and other topics related to the domain name, and committee members made various comments on the subjects.

Aug. 25 33rd JP Domain Name Advisory Committee meeting

JPRS reported its action regarding the report "Policy for correlating '.日本' with '.JP' if JPRS is to manage '.日本'" (JPRS-ADVRPT-2008001). Committee members made comments on the inquiry "Reconstruction of Geographic Type JP Domain Name" (JPRS-ADV 2010001) submitted by JPRS.

Oct. 27 34th JP Domain Name Advisory Committee meeting

An agreement was reached on a draft report drawn up based on the discussions at the 34th meeting in response to the inquiry "Reconstruction of Geographic Type JP Domain Name".

Committee members made comments on the appointment method regarding the inquiry "Method for appointing the members of the 6th JP Domain Name Advisory Committee" (JPRS-ADV-2010002) submitted by JPRS, and it was agreed to use the current appointment method.

Dec. 16 35th JP Domain Name Advisory Committee meeting

An agreement was reached on a draft report drawn up in response to the inquiry "Reconstruction of Geographic Type JP Domain Name" (JPRS-ADV 2010001).

An agreement was reached on a draft report drawn up in response to the inquiry "Method for appointing the members of the 6th JP Domain Name Advisory Committee" (JPRS-ADV-2010002).



Proposals and Presentations

Date	Title	At	Hosted by
Jan. 21	Email address internationalization - Introduction of non-ASCII email addresses - (in Japanese)	JANOG25 meeting	JANOG (*1)
Jan. 22	Let's find out about DNSSEC (in Japanese)	JANOG25 meeting	JANOG
Jan. 28 to 29	Present situation and countermeasures for phishing in ".JP"	Anti-phishing Seminar	Anti-phishing Committee (*2)/Ministry of Economy, Trade and Industry
Feb. 1	JPRS activities on monitoring and measurement of JP DNS and the registry system	2nd Global Annual Symposium on DNS Security, Stability and Resiliency	ICANN (*3)
Feb. 25	Report on 21st CENTR Technical Workshop	CENTR GA	CENTR (*4)
Feb. 26	Seizure of domain names upon civil decree	CENTR GA	CENTR
Mar. 4	Latest trends of domain names and DNS (in Japanese)	HOSTING PRO 2010 (Kokusai Fashion Center, KFC Hall)	HOSTING-PRO Executive Committee (*5)
Mar. 4	Imminent issues of 2010 "Measures for IPv6 and DNSSEC" - DNSSEC (in Japanese)	HOSTING PRO 2010 (Kokusai Fashion Center, KFC Hall)	HOSTING-PRO Executive Committee
Mar. 9	Research on the domain name market - jp	ICANN ccNSO member meeting (Kenyatta International Conference Center)	ccNSO (*6)
Apr. 14	Japanese IDN and search navigation	INET Asia 2010 (Hong Kong Convention and Exhibition Centre)	ISOC (*7)
Apr. 20	Report on ccNSO-related issues (in Japanese)	ICANN Debriefing Session (Fuji Soft Akiba Plaza)	JPNIC (*8)/IAjapan (*9)
Apr. 23	Introduction to DNSSEC (in Japanese)	2010 TOPIC Seminar, training session	TOPIC (*10)
Jun. 8	Basics of DNSSEC (in Japanese)	Interop Tokyo 2010 Workshop Practical Operation of DNS: For the Full-scale Spread of DNSSEC	Interop Tokyo 2010 Executive Committee (*11)
Jun. 16	Cooperation with communities in DNS and DNSSEC	AP Regional IGF (Cyberport, Hong Kong)	APrIGF (*12)
Jun. 18	Latest trends of new TLDs (in Japanese)	IPv6 Seminar for Engineers 2010 (Hiroshima Prefectural Gymnasium)	IPv6 Promotion Committee in Hiroshima (*13)
Jun. 18	Latest trends of DNS (in Japanese)	IPv6 Seminar for Engineers 2010	IPv6 Promotion Committee in Hiroshima
Jun. 23	Community initiatives on DNSSEC	ccNSO Members Meeting (Square Brussels Meeting Centre)	ccNSO
Jun. 27	.JP Update	APTLD Meeting	APTLD (*14)
Jul. 1	R&D activities in JPRS	SE and Afnic 2nd R&D workshop (.SE Office@Stockholm)	.SE (*15)/Afnic (*16)
Jul. 8	DNSSEC operation: authoritative DNS Server (in Japanese)	JANOG26 Meeting	JANOG
Jul. 21	What is DNSSEC? (in Japanese)	DNSSEC 2010 Summer Forum	DNSSEC Japan (*17)
Jul. 21	Schedule for implementing DNSSEC in .JP (in Japanese)	DNSSEC 2010 Summer Forum	DNSSEC Japan
Jul. 21	Root zone KSK management - Participating in ICANN KSK Ceremony 2 (in Japanese)	DNSSEC 2010 Summer Forum – To solve problems of operation technology	DNSSEC Japan
Jul. 21	DNSSEC trial with Dutch software (in Japanese)	9th dnsops.jp BoF	DNSOPS.JP (*18)
Jul. 21	TCR and I (in Japanese)	9th dnsops.jp BoF	DNSOPS.JP
Jul. 21	BIND 9.7.1-P2 (in Japanese)	9th dnsops.jp BoF	DNSOPS.JP
Jul. 26	An IDNA2008 implementation - idnkit-2.0	IETF78 Application Area Open Meeting	IETF (*19)
Aug. 5	Report on ccNSO-related issues (in Japanese)	ICANN Debriefing Session (Fuji Soft Akiba Plaza)	JPNIC/IAjapan

Date	Title	At	Hosted by
Aug. 13	Current state of DNSSEC	APAN - 30th MeetingNetwork Security Workshop	APAN (*20)
Aug. 23	Definition of ccTLD changing?	AP*Retreat (Marriott Gold Coast)	APstar (*21)
Sep. 3	DNSSEC (DNS Security Extensions) - DNS security extensions and implementation method (in Japanese)	ITmedia Virtual EXPO 2010	ITmedia Virtual EXPO Executive Committee (*22)
Sep. 27	DNSSEC measures for cache DNS server (in Japanese)	2010 training session for employees in charge of TOPIC Network	Tohoku Open Internet Community (TOPIC)
Oct. 30	ccNSO with IDN ccTLDs - from the aspect of ICANN Bylaws	APTLD (Landmark Hotel Amman)	APTLD (*23)
Nov. 1	DNS Blocking against illegal/inappropriate content	APTLD (Landmark Hotel Amman)	APTLD
Nov. 25	DNSSEC Tutorial - Practices (in Japanese)	Internet Week 2010 DNSSEC Tutorial (Akihabara Convention Hall)	JPNIC
Nov. 25	Enduring love and parent-child ties are key to security - Luncheon Talk on DNS (in Japanese)	Internet Week 2010 lunch seminar (Akihabara Convention Hall)	JPNIC
Nov. 25	Global trend on DNSSEC implementation (in Japanese)	Internet Week 2010 DNS DAY (Akihabara Convention Hall)	JPNIC
Nov. 25	JP DNS update (in Japanese)	Internet Week 2010 DNS DAY (Akihabara Convention Hall)	JPNIC
Nov. 25	Sharing technical verification results Report on technical verification activities in JPRS (in Japanese)	Internet Week 2010 DNS DAY (Akihabara Convention Hall)	JPNIC
Nov. 25	Inappropriate Bogon filter setting in authoritative DNS server (in Japanese)	10th DNSOPS.JP BoF	DNSOPS.JP
Nov. 25	Secret of http://test.dnssec-or-not.org/ (in Japanese)	10th DNSOPS.JP BoF	DNSOPS.JP
Nov. 25	addzone/delzone BIND 9.7.2 new functions (in Japanese)	10th DNSOPS.JP BoF	DNSOPS.JP

*1	JANOG: Japan Network Operators' Group	http://www.janog.gr.jp/
*2	Council of Anti-Phishing Japan	http://www.antiphishing.jp/
*3	ICANN: Internet Corporation for Assigned Names and Numbers	http://www.icann.org/
*4	CENTR: Council of European National Top Level Domain Regis	tries http://www.centr.org/
*5	HOSTING-PRO Executive Committee	http://hosting-pro.jp/
*6	ccNSO: Country-Code Names Supporting Organisation	http://ccnso.icann.org/
*7	ISOC: Internet Society	http://www.isoc.org/
*8	JPNIC: Japan Network Information Center	http://www.nic.ad.jp/
*9	IAjapan: Internet Association Japan	http://www.iajapan.org/
*10	TOPIC: Tohoku Open Internet Community	http://www.topic.ad.jp/
*11	Interop Tokyo 2010 Executive Committee	http://www.interop.jp/
*12	APrIGF: Asia Pacific Regional IGF	http://rigf.asia/
*13	IPv6 Promotion Committee in Hiroshima Area	http://www.supercsi.jp/ipv6deploy/
*14	APTLD: Asia Pacific Top Level Domain Association	http://www.aptld.org/
*15	.SE: The Internet Infrastructure Foundation	http://www.iis.se/
*16	Afnic: Association Francaise pour le Nommage Internet en Coo	beration http://www.afnic.fr/
*17	DNSSEC Japan	http://dnssec.jp/
*18	DNSOPS.JP: Japan DNS Operators Group	http://dnsops.jp/
*19	IETF: The Internet Engineering Task Force	http://www.ietf.org/
*20	APAN: Asia-Pacific Advanced Network	http://www.apan.net/
*21	APstar: The Community of Asia Pacific Internet Organizations	http://www.apstar.org/
*22	ITmedia Virtual EXPO Executive Committee	http://www.itmedia.co.jp/enterprise/info/itmexpo/2010
*23	APTLD: Asia Pacific Top Level Domain Association	http://www.aptId.org/



Press Releases

	* Original materials are written in Japanese.	
Date	Title	
Mar. 1	JPRS Supports the 12th ThinkQuest JAPAN, a Web Contest for Junior and Senior High School Students, and Presents the "Best Domain Naming Award (JPRS Special Award)" - Supporting Internet education of young people by allowing them to try using JP domain names -	
Mar. 25	JPRS Releases "JP Domain Name Registry Report 2009" Today – JP domain names recognized as one of the world's safest country code domains for improved reliability and stability –	
May. 25	JPRS Distributes Free Cartoon Booklet "How the Internet Works" to Junior and Senior High Schools in Japan - Keen awareness of the importance of Internet-related education shown by readers including teenagers - Jun. 1	
Jun. 1	Registration Starts for Participants of the "JANOG26 Meeting" Hosted by JPRS	
Jun. 15	Yoshiro Yoneya of JPRS Appointed Co-chair of the IETF PRECIS Working Group – To contribute to the drafting of a standard protocol as the common foundation for Internet internationalization –	
Jun. 17	Masato Minda of JPRS Selected as TCR for DNSSEC Operation of ICANN's Root Zone - To contribute to DNSSEC implementation in the root zone, as a representative of the Internet community -	
Jun. 24	"Geographic Type JP Domain Name Reconstruction Working Group" of JPRS Conducts a Questionnaire Survey - User questionnaire survey starts today to encourage the registration and use of Geographic Type JP domain names -	
Jul. 21	JPRS Will Deploy DNSSEC in the JP Domain Name Service in January 2011 – Making the Internet safer by improving the security of JP domain names –	
Oct. 27	".jp" Recognized as One of the World's Safest Domains for Second Consecutive Year	

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

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 names, or domain names of Japan. You may have seen addresses for websites and emails such as http:// \bigcirc .jp and $\triangle \triangle @ \bigcirc$.jp. We manage and administer a part of these addresses, namely, strings in the form of " \bigcirc .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. DNS 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, we are conducting standardization activities and technical verification for the smooth deployment of DNSSEC, a mechanism for improved DNS security. We are also verifying the technical aspects of email address internationalization (EAI) that will allow non-ASCII 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.

Translated: 28 Apr. 2011

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

Copyright © 2011 Japan Registry Services Co., Ltd. All rights reserved. JPRS, Japan Registry Services and other trademarks, service marks and designs are registered or unregistered trademarks of Japan Registry Services Co., Ltd. in Japan and other countries. All other trademarks not owned by Japan Registry Services Co., Ltd. that appear in this report are the property of their respective owners.



Japan Registry Services Co., Ltd.

http://jprs.co.jp/en/