Publishing of Exam Results & Counseling from Internet Data-Centre NIC

Internet Data-Centre at NIC (HQ) has been hub for e-governance activities be it a website, portal or e-gov project in providing a robust, reliable and secure platform for service delivery. Among the thousands of web/portals/e-gov projects hosted by NIC Data Centre, Electronic Publishing of Exam results and Counseling activity are the two projects being conducted as a part of G2C service at national level.

Vijay Kr. Vishwakarma
Technical Director
vijay.vk@nic.in

More than a decade back NIC had started hosting the exam results (of CBSE, state boards, university etc) on net. This year, NIC has hosted around 80 exam results received from around 25 Central/State Education Boards /Organizations.

Similarly on-line counseling process for admission to professional courses like Engineering, Medical etc., it has been carried out successfully by NIC for All India Engineering Entrance Examination (AIEEE/CCB) and various state counseling boards of Uttar Pradesh, Haryana, Delhi, Rajasthan, and Punjab.

Publishing of Exam Results

Electronic process has spun the Result publishing activity faster, better and more importantly in a dynamic and interactive way. NIC has responded to the needs of this new, fast-moving, paperless activity by offering a number of different methods and innovative combination of new and traditional technologies.

With the assistance provided by NIC, candidates can now accessed their results through Internet, Interactive Voice Response Systems (IVRS), and SMS. Students can register at *www.results.gov.in* for accessing their results for various examinations at student corner. Special corners are also being developed for Boards and Schools to address their result related request.

Some of the results that are being mostly visited during result declaration by students/parents and teachers are CBSE, CA on the national level and Maharashtra, Tamil Nadu and Madhya Pradesh on the state level.

Publishing of counseling activity

Traditional counseling is quite cumbersome and time consuming which also requires personal interactions between students and counselors at various stages.

To overcome these hassles, NIC has implemented the counseling activity through online system, which in turn enhanced it by reducing personal interaction to some extent, speed up the process and increase the transparency level.

Solution provided by NIC allowed Central Counseling Board i.e. AIEEE/CCB and various State Boards to conduct their counseling activity on the on-line basis for allotment of seats to the candidate (based on the criteria filled by them like rank, category, choices) during their admissions process for various professional courses like Engineering, MBA, MCA, MBBS, BDS, BCA, BEd and Diploma courses.

The URLs provided to these counseling activities are as follows: *http://aieee.nic.in/ccb.nic.in* (AIEEE/ CCB), *http://seeuptu.nic.in* (UP state), *http://tehadmissions.gov.in* (Haryana state), *http://cetdelhi.nic.in* (Delhi state), *http://psbte.gov.in* (Punjab state), *http://rtuadmissions (Rajasthan state)*

Thousands of candidates took part in the on-line counseling and greatly benefited by this system. Some of the statistical data for various counseling boards are as follows.

	Counseling Board/State Board	Name of Courses	Total Candidates qualified for counseling
1	AIEEE/CCB	B. Tech	96000
		B Arch	11000
2	SEE-UPTU (UP State)	B. Tech	78105
		MCA	8738
		MBA	20194
		B. Pharma	4709
	CPMT	MBBS,BAS,MUMS,BAMS,BHMS	4910
	BED	B.ED	95188
3	HARYANA State	B.E / B. Tech	31335
		Diploma (Engg)	73076
		MBA	4524
		MCA	1973

Technical Features of Exam Result Publishing and Counseling

In this section we consider the technologies used for publishing results electronically as well as online counseling activity.

Server infrastructure for both the process works on multi-tier application architecture model with having multiple Web/application servers configured on load balance clustering as front end servers and Database servers on high availability/mirroring clustering as backend Servers.

Hardware load balancer solution from CISCO has been used for smooth handling & proper distribution of workload among the web servers. Technology used inside is ASP & ASP.Net on IIS 6.0 and Database on RDBMS SQL Server.

Inside view of Internet Data Centre and Communication Racks & SAN Storage at NIC (HQ)

A Collaborative Exercise

To be successful, this exercise has to be borne out of a collective effort from all concerned viz. the Educations Boards, Counseling Boards/Organisations, the NIC Regional/State Centers and the technical experts from the concerned group at NIC Headquarters. Sensitive to the needs and anxious state of the students, it has to be realized that disseminating the exam results /counseling through the Internet is not just an ICT exercise. The concerned team has to work at all odd hours to meet the varying requirements of different boards and ensure that the results are made available to the students in a timely, accurate and convenient manner. As it is a Collaborative exercise, the concerned State/UT centers and the divisions at NIC HQ have to work closely and cooperatively to make this exercise a success.

Hosting of Exam Results and Counseling activity on Internet is being successfully conducted by NIC for so many years now. NIC Data Centre is being instrumental in providing scalable secure and readily available infrastructure support to e-Gov applications in this endeavour.